DOCUMENT RESUME

ED 441 370 HE 032 846

AUTHOR	Peng, Samuel S.; Korb, Roslyn A.; Rose, Joseph; Snyder, Thomas D.; Cohen, Michael P.
TITLE	Integrated Postsecondary Education Data System (IPEDS): An Improved System. Final Draft.
INSTITUTION	National Center for Education Statistics (ED), Washington, DC.
PUB DATE	1999-08-31
NOTE	58p.
PUB TYPE	Reports - Evaluative (142)
EDRS PRICE	MF01/PC03 Plus Postage.
DESCRIPTORS	*Data Collection; Database Design; Database Management Systems; Database Producers; *Databases; Federal Programs; Federal Regulation; Government School Relationship; Higher Education; Reference Services; Research Methodology; Statistical Surveys; World Wide Web
IDENTIFIERS	*Integrated Postsecondary Education Data System; National Center for Education Statistics

ABSTRACT

This study is the final report from the National Center for Education Statistics task force on redesign of the Integrated Postsecondary Education Data System (IPEDS). Following an executive summary outlining the need for changes and a series of recommendations, Section 1 details the reasons, goals, and processes involved in the IPEDS redesign. Section 2 outlines recommended actions for the new IPEDS, including an implementation schedule and the resources required. A key element is the recommendation for a Web-based data collection system. Section 3 offers alternative options, recognizing that a Web-based system demands development of software and appropriate resources which might not be available. Attachments include: a listing of statutory data requirements specified in laws and regulations; the current components of IPEDS; externally mandated changes and additions to IPEDS; issues examined in the redesign; a discussion of the issues, origins, and potential solutions; and lists of groups, organizations and individuals consulted. (RH)

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ED 441 370

Integrated Postsecondary Education Data System (IPEDS): An improved system

Final Report

By

NCES Taskforce for IPEDS Redesign:

Samuel S. Peng (Chairperson)
Roslyn A. Korb
Joseph Rose
Thomas D. Snyder
Michael P. Cohen

Meredith Ludwig (ESSI Consultant)
Michael Lance (ESSI Consultant)

C. Dennis Carroll (ex-officio member)

August 31, 1999

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Transmission Memo to Commissioner

Date: August 31, 1999

TO: Dr. Gary W. Phillips
Acting Commissioner
National Center for Education Statistics

THROUGH: C. Dennis Carroll, Ph.D.
Associate Commissioner
Postsecondary Studies Division

FROM: NCES Taskforce for IPEDS Redesign:
Samuel S. Peng (Chairperson)
Roslyn A. Korb
Joseph Rose
Thomas D. Snyder
Michael P. Cohen

SUBJECT: Final Report on the Redesign of the Integrated Postsecondary Education Data System (IPEDS)

We are pleased to report to you that we have completed our task on the Redesign of the Integrated Postsecondary Education Data System (IPEDS). We are submitting our design options for your review and approval.

The design options are in two categories: the recommended (desired) and the alternative options. Within the recommended option, there are multiple recommendations for changes to IPEDS. The result of these changes will adequately and effectively address various issues of concern for IPEDS. In addition, the postsecondary education community has been consulted about this option, and has invested a great deal of time and energy in developing this option. This participation in the process of IPEDS redesign has raised the community's expectations for IPEDS and it is important that NCES make progress toward meeting these expectations. This option, however, requires additional resources to develop computer systems and related materials and to provide technical assistance to institutions. We hope that the necessary resources for this monumental data system will be available.

In case the required resources are not available, the alternative options, such as delaying the implementation of the desired option, and continuing the current paper form of data collection with a few modifications, may be chosen. Any alternative option, however, will be far less effective in addressing the major concerns, particularly the timeliness and the relevance of data for policy decision-making, that have led NCES to the redesign of IPEDS.

We will be happy to meet with you to clarify any questions you may have. We appreciate having had the opportunity to undertake this important task.

Acknowledgments

The redesign of IPEDS is a collaborative effort of the postsecondary education community. We are grateful to many individuals from various offices and organizations, who graciously gave their time to make comments and suggestions on various considerations for the redesign of IPEDS. In particular, we want to thank individuals in the four working groups of the National Postsecondary Education Cooperative (NPEC): (1) universe of postsecondary education institutions; (2) students; (3) faculty and staff; and (4) finance, costs, and financial aid. These individuals gave in-depth review of IPEDS and provided excellent suggestions for improving IPEDS. Their input is the primary basis for the various recommendations presented in this report.

A complete list of individuals who participated in the IPEDS redesign process is presented in Appendix F. In addition, many people who attended IPEDS briefing sessions at various associations' meetings also made helpful comments. Their names are not included in the list, but their comments are equally appreciated. We sincerely thank all individuals and organizations that helped us make this redesign of IPEDS successful.

Table of Contents

	Page
Memo to Commissioner	**2**
Acknowledgments	**3**
Executive Summary	**5**
I. Introduction -- reasons, goals, and processes for IPEDS redesign	**11**
A. Current status of IPEDS	11
B. Reasons for IPEDS redesign	12
C. Goals for IPEDS redesign	13
D. Processes for IPEDS redesign	13
E. Limitations	14
II. The New IPEDS	**16**
A. Recommended improvement actions	16
1. Coverage of institutions	16
2. Structure of IPEDS	18
3. Data collection method	19
4. Data content	20
5. Reporting by race codes	25
6. Classification of institution employees	27
7. Data analysis and dissemination	28
8. Communication with data providers and stakeholders	29
9. Technical assistance to data providers and users	29
10. Collaboration with institutional data developers	30
11. On-going enhancement process	32
B. How would issues of concern for redesign be addressed by the new IPEDS?	32
1. Data requirements	32
2. Timeliness of data	32
3. Relevance of data	33
4. Quality of data	33
5. Efficiency of data collection	33
6. Utility of data	33
7. Communication and collaboration	33
C. Implementation schedule and resources required	34
1. Schedule	34
2. Resources	35
III. Alternative Options to the New IPEDS	**36**
Attachments	**38**
A. Statutory data requirements for IPEDS	38
B. Current components of IPEDS	39
C. Externally mandated changes and additions to IPEDS	40
D. Issues examined in the redesign of IPEDS	41
E. Discussion of issues, origins, and potential solutions	42
F. List of groups, organizations, and individuals consulted	53

Executive Summary

It has been an NCES goal to provide quality data in a timely fashion to policy makers, researchers, and other concerned customers. It is also an NCES goal to provide products and services that will facilitate the use of quality data. IPEDS was originally developed in 1986 to achieve these goals, and has provided useful data on postsecondary education over the years.

However, several externally mandated changes and additions to IPEDS, changes in technology for data collection and dissemination, changes in postsecondary education, and new expectations for IPEDS were pressing for the redesign of the system. Thus, the charge of the NCES IPEDS Redesign Taskforce was to revise the system to meet these new demands and requirements and to further the achievement of the above mentioned NCES goals. Specifically, the Taskforce aimed to develop a new IPEDS that would:

- respond to external data requirements (including Congressional mandates for price and financial aid data, new reporting requirements for race/ethnicity, a new finance form for public institutions, and new CIP codes);
- improve timeliness and quality of IPEDS data;
- ensure the relevance of data;
- increase the efficiency of data collection and utility of data; and
- enhance communication and collaboration with data providers and stakeholders.

After consulting with IPEDS users, IPEDS data providers, and representatives from a number of higher education organizations and holding a series of meetings at various conferences, the Taskforce concluded that substantial changes to IPEDS would be necessary. The Taskforce's recommendations for making these changes are highlighted below. Resulting changes in data content and implementation schedule are summarized in separate sections that follow.

Recommendations

Recommendation 1. *IPEDS shall cover all institutions participating in Title IV [student financial aid] programs and all non-Title IV postsecondary institutions that are open to the general public.* The full set of IPEDS data will be collected only from degree and other award granting Title IV postsecondary education institutions; other institutions will be asked to submit a minimal set of data (described in Recommendation 4d below).

Recommendation 2. *IPEDS shall be organized into three waves of collection based on data availability (i.e., when data are expected to be available): October, December, and March Collections. For those non-title IV institutions that do not respond to these collections, a fourth wave of data collection in paper form will be used to collect minimal data.* For each data collection, the time period for data submission is about eight weeks: between September 1 and October 31 for the October collection, between December 1 and February 7 for the December collection, and between February 16 and April 5 for the March collection. The minimum data collection will begin on April 15 and run until

May 15 or until 85% of institutions have either submitted data or refused to do so. After the closing date, no data can be submitted to the computer system, and non-responses will be imputed.

Recommendations 3a-b. *In 2000-01, IPEDS shall use a Web-based system to collect data with built-in edits and other quality checks to process the data when they are entered into the system; and for institutions that do not have the Internet capability, NCES shall provide special administrative assistance to help process their submissions. The current IPEDS coordination system shall be maintained and the Web-based system shall accommodate the current coordination practices.* Institutions will be able to enter data on a Web-based form or alternatively to upload a file containing the data.

Recommendation 4a. *The October Collection shall collect the following data elements with a few additions and deletions:*

Institutional Characteristics (IC), including price information (tuition and fees for the current year).
Completions -- total count for each award level by 6-digit CIP codes; by gender and by race/ethnicity.

Recommendation 4b. *The December Collection shall collect the following data elements with a few additions and deletions:*

Full-year unduplicated enrollments -- unduplicated headcount for a 12-month period, by gender and race/ethnicity, and by level of enrollment if applicable.
Full year unduplicated headcount of first-time full-time students over a 12-month period for less-than-2-year institutions.
Credit/contact hour activity for a 12-month period.
Fall enrollment by gender and race/ethnicity.
Fall enrollment by age and by residence status (mandatory in alternating years).
Fall staff.
*Salaries of full-time faculty. (*Recommendations for substantive changes to the Fall Staff and Salaries Surveys are stated in Recommendations 6a-b.).

Recommendation 4c. *The March Collection shall collect the following data elements:*

Student financial aid -- average amount of financial assistance by type, and number of students receiving financial assistance for the previous year plus contextual student count data.
Institutional finance (previous year).
Graduation rates.

Recommendation 4d. *For the minimal data set, NCES shall simply focus on (1) the directory information such as mission, date established, name, address, phone, e-mail address, Web address, control, level, accreditation status; and (2) basic institutional characteristics such as number of students enrolled (by sex and race/ethnicity), number of awards by program, number of faculty/staff, tuition and fees.*

Recommendation 4e. *NCES shall continue working with institutions to develop and select new items that are relevant and useful to institutions.*

Recommendation 5. *NCES shall adopt the 16 race/ethnicity categories recommended by the NPEC/NCES/NSF Policy Panel on Racial/Ethnic Reporting for the Fall Enrollment Survey, the Completion Survey, the Fall Staff Survey, and the Graduation Rate Survey.* These reporting categories provide one table that represents 10 minimum/lower-bound counts (plus a total unduplicated headcount) and a second table with six maximum/upper-bound counts for each of the six racial/ethnic categories.

Recommendations 6a-b. *NCES shall adopt the framework for reporting institutional employee data recommended by the NPEC Working Group on Faculty. NCES shall continue to explore a measure of instructional activity/work load.* The working group is proposing that all employees be classified on the Staff Survey by full-time/part-time status, occupational/functional categories, and faculty status and that data for employees in medical schools be collected separately. The working group is also developing detailed definitions and instructions for categorizing employees. Salaries for employees in "Instruction/research/public service" categories will be reported on the Faculty Salaries Survey, meaning that the two surveys are integrated. In addition, information about instructional activity (e.g., total credits taught, number of classes taught) shall be further explored with institutions to develop proper measures.

Recommendation 7. *NCES shall develop and maintain a peer analysis system to facilitate comparative analyses of IPEDS data by institutions and other users, a Web page on which consumer information for each institution can be disseminated by NCES to the general public, and a system to select and link data from various components of IPEDS for statistical analyses. These systems shall be accessible to persons with disabilities.*

Recommendation 8. *NCES shall employ multiple approaches to maintain effective communication with institution chief executive officers, institution and state IPEDS data providers, and data users in the postsecondary education community.*

Recommendations 9a-e. *During each data collection period, NCES shall provide HELP desk support for respondents. NCES shall provide administrative assistance to institutions that do not have access to the Internet or the capacity to provide data through the Web-based system. NCES shall conduct or support training workshops for institution and state IPEDS coordinators (keyholders) to become fully conversant with the Web-based system for data collection and analysis. NCES shall develop an on-line tutorial program for data providers to get answers or instructions for performing certain tasks with the Web-based system. NCES shall establish the IPEDS Fellows Program.*

Recommendation 10a. *NCES shall support NPEC's initiative to coordinate and collaborate with other major Postsecondary Education data developers to reduce the overall response burden to institutions.*

Recommendation 10b. *NCES shall support the Voluntary Institution On-Line Information Network (VTOLIN), a voluntary peer analysis system, to reduce the overall response burden to institutions and serve as a test platform for IPEDS item development.*

Recommendation 11. *NCES shall adopt a process of continuous improvement for the IPEDS system.*

Changes In Data Content

In making IPEDS responsive to external data requirements and ensuring relevance and quality, the Taskforce also gave in-depth review of the data content. The Taskforce suggested that the following sets of items be added to IPEDS, in addition to the substantive changes represented by the new race/ethnicity codes and the new reporting of employee data described in Recommendations 5 and 6a-b above. In making these suggestions, the Taskforce has considered the potential extra burden to institutions and state agencies and the availability of data. As described earlier and in the Implementation Schedule section, the reporting of these new data will be phased in to allow institutions to make any necessary arrangements.

1. Selectivity and freshmen profile data (October collection). Because of Congressional interest in college selectivity, items relating to the freshman class will be added. A screening item will ask whether the institution has an open admission policy for all or most students. If the institution indicates they have such an open-admission policy, they would not supply data for the other two items. A second item would ask for the number of applications, admissions, and enrolled students for the full-time first-year cohort, by gender. A third item would ask for the percentage and the number of students submitting SAT/ACT scores and the 25th and 75th percentile scores for each test. However, if the institution does not require test scores for admission or if fewer than 60% of students in the entering cohort submitted scores for a given test, the percentile scores for that test would not be reported. All data would be for the prior fall's entering class and would include new students admitted the summer prior to that fall.

2. Five sets of check-off items (October collection). One set asks whether the institution accepts 1) dual credit (college credits earned while in high school), 2) credit for life experiences, 3) advanced placement credits. The second set asks whether the institution offers any of the following: 1) ROTC, 2) study abroad, 3) accelerated programs (e.g., on weekends), 4) distance learning opportunities. The third set will cover special curricluar offerings for students. The fourth set asks about policies for students from non-regionally accredited high schools in yes/no response categories. The fifth set includes options to item C5 that ask about the presence of various admission requirements: secondary school GPA, secondary school rank, secondary school record, college-preparatory program in secondary school, recommendations, formal demonstration of competencies (e.g., portfolios, certificates of mastery, assessment instruments). New response categories will also be added for this third set: 1) required, 2) recommended, 3) neither required nor recommended, 4) don't know.

3. Data on multiple majors (October collection). Because of interest, primarily at four-year institutions, in providing more complete information about graduates with multiple majors (e.g., dual or split majors), a new table shall be added to the Completions Survey to provide data by CIP code, gender, and race/ethnicity for additional undergraduate majors not already reported in Part A of the survey. Institutions that do not have multiple majors would not complete the new table.

4. Non-credit activity for two-year institutions (December collection). In response to requests from two-year institutions to track growing non-credit activity, prior-year data about non-credit courses will be added for two-year institutions for which "non-credit instruction constitutes an important part of the institution's educational offerings (as

determined by the institution)." The new item would request the number of non-credit courses and the corresponding contact hours for 1) courses for workforce development and 2) other non-credit courses.

5. Percent of entering class represented by Graduation Rate Survey cohort (December collection). In response to requests from a number of institutions for whom the GRS cohort is not representative of their entire entering class, a clarifying question would be added to future Graduation Rate Surveys to indicate the proportion of the entire undergraduate entering class represented by the GRS cohort. To facilitate computing such a percentage, the December collection will include an item that asks for the total (full-time plus part-time) undergraduate entering class (including first time, transfer, and non-degree students).

Other Changes. Institutional information and price-related items from the IPSFA will be moved to the October collection and the IPSFA financial aid and student count items will be moved to the March collection. Unduplicated headcounts and credit hour data for the previous 12-month period will be collected in December instead of with Institutional Characteristics items. Seven check-off items will be deleted from the Institutional Characteristics survey (C2, C3, C4, C7, 3 of 9 options in C8, F1, F2), five clarifying items will be deleted from the Fall Enrollment Survey (D1, D2, D4, D5, D6), and the entire Fall Enrollment in Occupationally Specific Programs will be deleted. Instructions will be expanded in several areas.

Implementation Timeline

1999-2000	The current surveys in paper form (and existing electronic methods) with some changes in schedule was implemented. The survey of Fall Enrollment in Occupationally Specific Program was dropped. Institutional Price and Student Financial Aid (IPSFA) was implemented. Training on Web-based collection will be continued.
2000-2001	All three waves of data collection will be Web-based. Peer analysis system and College Opportunities On Line (COOL) will be fully implemented. Minimal data will be collected from non-Title IV institutions that do not respond to the full surveys. All item deletions and modifications and instruction clarification will be implemented. Only the data existing in the 1999-2000 paper forms will be required on the Web-based surveys. Institutional price and student financial aid items from IPSFA will be required. Both old and new race/ethnicity codes will be available in the Web-based system, but the reporting of new race/ethnicity codes will be optional.
2001-2002	All new items, including check-off items, will be added to the system, but responses to these items are optional.

	Staff and faculty salaries under new classification categories will be optional.
	New race/ethnicity reporting will be optional.
	IPEDS fellows program will be initiated.
2002-2003	New race/ethnicity reporting required for fall enrollment.
	Finance survey for public institutions under new GASB standards will be implemented as required.
2003-2004	New race/ethnicity codes will be required for Fall Staff and Completions (for awards granted in 2002-2003)
	New CIP codes used for reporting 2002-2003 completers.

In summary, the recommended new IPEDS will not only provide comprehensive data but also greatly improve the efficiency of data collection, the timeliness of data, and the uses of the data. It will also improve communication and collaboration with data provides and users. It will accomplish all of the redesign goals described earlier. However, it would require additional fiscal and staff resources for development and project management. We hope the required resources will be available for making these monumental improvements to IPEDS.

I. Introduction:
Reasons, Goals, and Processes for IPEDS Redesign

Providing quality data in a timely fashion to policymakers, researchers, and other concerned customers has been an NCES goal. NCES also strives to provide products and services that will facilitate the use of quality data, for data are not cheap and cannot be considered valuable and relevant unless they are widely used. The Integrated Postsecondary Education Data System (IPEDS) was originally developed to achieve these goals, and the redesign was undertaken to further accomplish these goals.

A. Current Status of IPEDS

IPEDS was launched in 1986. It integrates the collection of institution-level data from all institutions whose primary purpose is to provide postsecondary education programs and that are open to the general public. These institutions include four-year colleges and universities, two-year colleges, and less-than-two-year vocational/technical institutions in this country. Prior to IPEDS, the data were collected through three separate systems: the Higher Education General Information Survey (HEGIS), the Survey of Non-Collegiate Postsecondary Institutions (SNPI), and the Vocational Education Data System (VEDS).

IPEDS was initiated to address technical problems of HEGIS, SNPI, and VEDS while simultaneously satisfying the various statutory data requirements specified in laws or through regulations (see details in Appendix A).

Pursuant to meeting these mandatory requirements and needs, data collected by IPEDS are comprehensive. They include data on providers of postsecondary education (characteristics of institutions), participants and completers in postsecondary education (students), programs offered by institutions, and the resources involved in the provision of postsecondary education, including human, library, and financial resources. Currently, these data are collected through the following survey components: Institutional Characteristics (IC), Fall Enrollment and Compliance Report (EF), Fall Enrollment in Occupationally Specific Programs (EP), Completions and Compliance Report (C), Finance (F), Salaries of Full-time Instructional Faculty (SA), Fall Staff (S), Academic Libraries (L), and Graduation Rate Survey (GRS) (see details in Appendix B).

Of these survey components, IC, EF, C, F, SA, and GRS data are collected annually. Fall enrollment data by age and by residence and migration, fall enrollment in occupationally specific programs, fall staff, and academic library data are collected biennially. Over the past decade, all data collection and processing work was carried out by the Bureau of the Census under an interagency agreement with NCES.

IPEDS data are intended for a variety of users, including institutional researchers, policymakers at various levels, the business community, parents, and students. Federal and state governments and institutions have used the data for compliance reports. Government agencies and institutions have used them for their mandates and for program planning and evaluation as well as for resource planning and allocation. Academic researchers and higher

education associations have used them for peer analysis and for education and other social policy development. Moreover, business and industry, labor unions, and accreditation agencies have used them for marketing, manpower planning and resource analysis as well as evaluation and policy studies. Media people have also used them for describing the condition and the status of postsecondary education and covering stories at individual institutions in this country, and the general public accessed the date for consumer information.

Annual data collection generally begins July 15 by mailing survey forms to all institutions. Institutions then submit their responses in paper form or in electronic form directly or through state IPEDS coordinators to NCES. Some states generate their responses centrally for their coordinated institutions. In general, it is expected that the data will be available about one year after mailing out the survey forms. In reality, however, it takes a much longer time because many institutions do not respond on time and the data must go through laborious editing and imputation processes. The editing process for each institution cannot begin until its data have been received and entered into the IPEDS computer system, and the imputation of non-responses cannot begin until the data file is complete and edited. Thus, the timeliness of IPEDS data has been an issue of concern for many years.

B. Reasons for IPEDS Redesign

Although IPEDS has provided useful data on postsecondary education over the years, there are several forces pressing for the redesign of the system.

First of all, there are externally mandated changes and additions to IPEDS. The Higher Education Amendments of 1998 require NCES to develop a uniform methodology for reporting the price of postsecondary education to undergraduate students. In particular, standard definitions must be developed for tuition and fees, and other student expenses, average financial aid by type of assistance (i.e., federal grants, state grants, institutional grants, and loans), and the number of students receiving each of these types of assistance. Moreover, in October 1997, the Office of Management and Budget (OMB) issued new standards for collecting race/ethnicity data from individuals on all federal surveys. These requirements plus an anticipated new financial form for public institutions and revised CIP codes necessitate many changes in IPEDS (see details in Appendix C).

Second, the current paper-based process of data collection, as mentioned earlier, is cumbersome. Many institutions and some state coordinators do not submit their data on time. In addition, the data editing, correction, and imputation processes take a long time to complete. Thus, by the time the data are cleaned, missing data are imputed, and the data file is made ready for public release, the data are already more than two years old and are not timely for many important uses, particularly for policy decision-making.

Third, the advancement of computer-related technology for data collection, analysis, and dissemination, changes in postsecondary education, and new expectations for IPEDS also dictate changes in what is collected and the way these data are collected and disseminated. Policymakers, researchers, and the general information consumers want more timely data that are easy to access and easy to use. Data providers also want their reporting process to be less burdensome. These expectations or demands provide additional reasons for improving

IPEDS, particularly in ways that result in more complete data that are less burdensome to providers and are accessible earlier and more easily.

For all these reasons, NCES has undertaken the redesign of IPEDS so that IPEDS can be responsive to congressional mandates and users' data needs, and can have increased utility for institutional researchers and policymakers.

C. Goals for IPEDS Redesign

NCES established an internal taskforce to undertake the redesign of IPEDS. The ultimate goal of this taskforce was to redesign IPEDS such that it will incorporate all new data requirements and address issues relating to timeliness, coverage, quality, comprehensiveness, accessibility, utility, burden, and costs. Specifically, it was expected that the improved IPEDS would be:

1. *A system for quality and relevant data*: IPEDS shall be responsive to congressional mandates and data needs of customers for management decision-making, policy studies, program evaluation, peer analyses, and research in postsecondary education, as well as for general consumer information.

2. *A system for timely data*: IPEDS shall be designed to minimize the time span between the availability of data at each institution and the completion of data collection and the time that NCES will take to release the national database.

3. *A system of modern technology*: IPEDS shall apply state-of-the-art electronic technology to the collection, processing, analysis, and dissemination of data to achieve timeliness, high quality, and utility of data and to reduce the response burden to institutions.

4. *A system friendly to data providers and users*: IPEDS shall provide software, training, and technical support to facilitate data collection and the access to and analysis of the data. IPEDS shall be easily accessible and widely used by institutions and other users.

5. *A system that values communication and collaboration.* IPEDS shall apply multiple mechanisms and procedures to communicate effectively with data providers and stakeholders to increase the understanding of IPEDS, to improve cooperation with NCES, and to promote the use of IPEDS data.

All these goals or principles have provided direction and guidance for the redesign of IPEDS.

D. Processes for IPEDS Redesign

To achieve these goals, the IPEDS Redesign Taskforce undertook various actions to examine a wide range of issues relating to whom is served (customers), what is served (data coverage), and how to serve (collection, analysis and dissemination strategies). (A list of specific issues is presented in Appendix D.) These actions included:

1. Review of the legislation that has implications for data content and timelines.

2. Development of a data map to provide the framework for sorting and prioritizing data elements to be covered by IPEDS and other surveys in postsecondary education.

3. Gathering of input from data users and providers through focus group discussions, association meetings/conferences, special working group discussions, and an NCES customer survey (see Appendix E -- list of groups consulted). The four working groups of the National Postsecondary Education Cooperative, formed to evaluate various aspects of IPEDS, proved to be major contributors to the process. The four working groups respectively dealt with issues relating to (1) students; (2) faculty and staff; (3) finance, costs, and financial aid; and (4) the universe of postsecondary education institutions.

4. A close consultation with associations of postsecondary education. NCES staff and representatives of higher education groups have met regularly during the past six months to discuss proposed changes in IPEDS such as new reporting time frames, a Web-based collection, and a new voluntary data set for peer analysis. Additionally, on May 17, 1999, NCES hosted a full-day session with representatives of higher education associations, NSF and the Department of Education, to review in depth all proposed changes in IPEDS. Finally, NCES staff has attended the following association meetings to provide an over view of the IPEDS redesign and to get additional input: SAIR (Oct., 1998), AACRAO (April 21); SHEEO (May 10-11); AIR (January 28-29, May 29-June 3); CCA (June 25); and NASFAA (July 12-14).

5. A systemic evaluation of current IPEDS products such as data files, publications, presentations, and other materials.

6. Discussion with program staff and contractors to identify problems relating to the structure of IPEDS and the data collection and processing procedures, and to solicit suggestions for solving these problems.

7. Evaluation of Web-based technology for on-line data submission and analysis to determine its utility for IPEDS data collection and the level of effort it would require.

E. Limitations

There are certain contextual factors that constrain IPEDS and the redesign processes. These aspects should be kept in mind in evaluating the recommended new IPEDS described in the next section.

First of all, IPEDS is an institution-based system. Traditionally it has collected data only from institutions whose primary mission is postsecondary education and that are open to

the general public. Although this system captures data on the majority of postsecondary activities in this country, it has not captured data on postsecondary education programs in non-postsecondary institutions or programs offered in institutions that are not open to the general public (e.g., McDonald's University). Such data are increasingly demanding attention; they have been captured to some extent through other NCES systems such as the National Household Education Survey (NHES) and high school student-based longitudinal studies.

Moreover, IPEDS collects aggregated data about students, faculty/staff, institutional finance and resources, and institutional characteristics. There are other data systems at NCES that collect data on postsecondary education directly from samples of students, faculty members, and the general public. They include the National Postsecondary Student Aid Study (NPSAS), Baccalaureate and Beyond (B&B), the Beginning Postsecondary Student Study (BPS), the National Study of Postsecondary Faculty (NSOPF), National Education Longitudinal Study (of high school cohorts), Survey of Earned Doctorates Awarded in the United States, and the National Household Education Survey (NHES). These systems can supplement IPEDS in collecting data that cannot be efficiently collected from institutions. Thus, in thinking about postsecondary education data, many data items that are beyond IPEDS can be obtained from these systems.

Further, this redesign of IPEDS focused on its general structure, coverage, and operations. It does not include detailed survey forms, definitions of data elements, and technical specifications. These will be developed by contractors or special working groups of NCES staff later.

Finally, the time period for redesigning IPEDS does not allow for a careful field-testing of some new items or forms, although we have solicited input and comments from various data providers and users. While we have confidence that these new items and forms are appropriate, we still believe that they should be further tested through such procedures as a cognitive lab and an "optional/trial year" in the Web-based system before they are fully implemented and required. The implementation of these new items will be reflected in our recommended implementation schedule.

II. The New IPEDS

Based on the input from the postsecondary education community and the goals outlined in the previous section, the Taskforce presents its recommendations for improving IPEDS below. These recommendations cover a variety of aspects of IPEDS, ranging from the institutional universe, data collection method, and data analysis and dissemination, to the communication with IPEDS stakeholders. The Taskforce believes that implementation of these recommendations jointly will meet data needs, improve data quality and timeliness, and increase the utility of data for institutions and other data customers. Discussion of related issues and options for addressing each issue are included in Appendix E.

A. Recommended improvement actions:

1. Coverage of Institutions

Recommendation 1: *IPEDS shall cover all institutions participating in Title IV' (student financial aid) programs and all non-Title IV' postsecondary institutions that are open to the general public.*

Institutions that provide postsecondary education can be classified into the following types (see Chart A below):

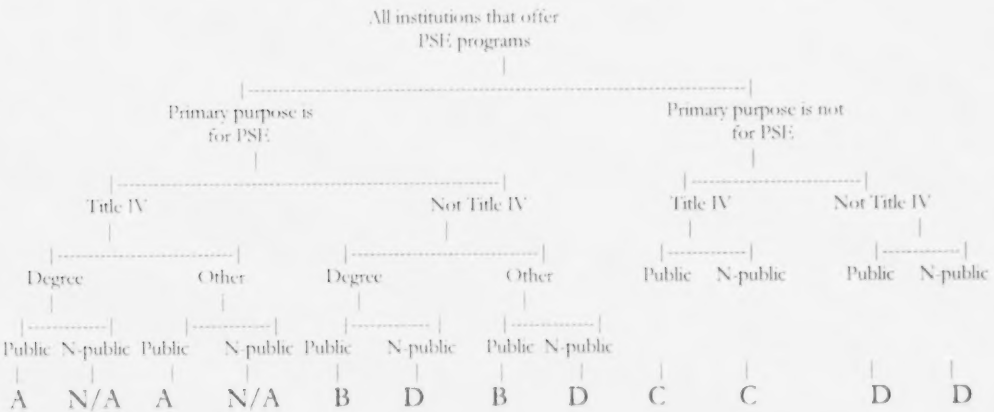
- Type A are degree and other award granting Title IV postsecondary education institutions (i.e., whose primary mission is to provide postsecondary education) that are open to the general public;
- Type B are degree and other award granting non-Title IV postsecondary education institutions that are open to the general public;
- Type C are Title IV institutions whose primary mission is not to provide postsecondary education, but that offer postsecondary education programs to the general public (e.g., high schools that offer postsecondary education courses); and
- Type D are all other institutions, including (1) postsecondary education institutions whose programs are not open to the general public; and (2) non-Title IV institutions whose primary mission is not postsecondary education but includes postsecondary education programs.

IPEDS shall cover all institutions of Types A, B, and C. Data to be collected from each of these types of institutions, however, may vary. We recommend that the full IPEDS data set be collected from Type A institutions. They are required by law to provide data to IPEDS. Type B institutions shall be encouraged to provide the full IPEDS data that are applicable to them in order for them to make effective use of data from other peer institutions. If they do not, they shall be requested to provide a minimum data set (to be defined in the next section). Type C institutions shall be requested to provide minimal data that are related to postsecondary education. Data about Type D institutions and their students cannot be reliably collected through IPEDS. Information about these institutions shall be obtained through individual-based surveys such as National Household Education Survey (NHES) and National Educational Longitudinal Study (NELS). This approach will enable NCES to provide at least a

complete count of the providers and participants in postsecondary education and a brief description of their basic characteristics except Type D institutions.

There is the issue of potential undercoverage of institutions, particularly those non-Title IV less-than-two-year institutions. To address this issue, we recommend that NCES continue working closely with state agencies that issue licenses or certifications for education programs to obtain up-to-date listings of institutions. NCES shall also conduct an evaluation study biennially, using strategies such as area frame sampling, to determine the degree of undercount and the adjustment factor for the national statistics. With the improved listings of institutions and other improvements in data collection and the access and use of data to be described later, we believe that non-title IV institutions will be more likely to respond in a more timely fashion with higher quality data.

Chart A. Classification of Postsecondary Education Institutions



N-public = not open to the public

A = degree and other award granting Title IV postsecondary education institutions that are open to the general public

B = degree and other award granting non-Title IV postsecondary education institutions that are open to the general public

C = Title IV institutions whose primary mission is not to provide postsecondary education, but that offer postsecondary education programs to the general public

D = all other institutions, including (1) postsecondary education institutions whose programs are not open to the general public; and (2) non-Title IV institutions whose primary mission is not postsecondary education but includes postsecondary education programs

N/A = there are no institutions in this category

2. Structure of IPEDS

Recommendation 2: *IPEDS shall be organized into three waves of collection based on data availability (i.e., when data are expected to be available): October, December, and March Collections. For those non-Title IV institutions that do not respond to these collections, a fourth wave of data collection in paper form will be used to collect minimal data.*

We suggest that NCES arrange the data elements of different surveys into groups that are coherent in terms of data availability as well as content. Data should be collected when institutions have them. This approach will facilitate the data collection process.

Initially, we considered the application of four waves of data collection: August, October, December, and March. After reviewing comments from institutions, it was clear that three waves of data collection -- October, December, and March, would be more fitting to institutions' calendars. For each wave of data collection, institutions shall have a window of eight (8) weeks to submit the data (see the chart below). After the close of the March collection, those non-Title IV institutions that do not respond to these surveys will be sent a form in paper format to collect minimal data with telephone follow-up to non-responding institutions.

The time frame for the 2000-2001 reporting year and components for the data collection are presented below.

	Reporting Start Date	Receipt Closeout
October Collection:	September 1	October 31
Institutional characteristics (includes price information)		
Completions		
December Collection:	December 1	February 7
Full-year unduplicated enrollments (previous year)		
Full year unduplicated headcount of first-time full-time students for less-than-4-year institutions (previous year).		
Credit/contact hour activity for a 12-month period in previous year.		
Fall enrollment (current year) by gender and race/ethnicity.		
Fall enrollment (current year) by age and by residence status (mandatory in alternating years).		
Fall staff (current year)		
Faculty salaries (current year)		
March Collection:	February 16	April 5
Financial aid (previous year)		
Institutional finance (previous year)		
Graduation rates (previous year)		

Minimum Data Collection (items described in Recommendation 4d) (* or to the date when the collection has reached 85% response + refusal rate)	April 12	May 15*

3. Data Collection Method

Recommendation 3a: In 2000-2001 *IPEDS shall use a Web-based system to collect data with built-in edits and other quality checks to process the data when they are entered into the system; and for institutions that do not have the Internet capability, NCES shall provide special administrative assistance to help process their submissions.*

The advancement of computer technology and the Internet has revolutionized the way data can be collected, analyzed, and disseminated. Thus, NCES should take the initiative to use state-of-the-art technology in IPEDS. We therefore recommend that IPEDS adopt a Web-based data collection system, moving from paper to electronic data collection as quickly as possible. This system shall be accessible to persons with disabilities.

This system shall edit the data as they are being entered to shorten the data processing time and increase data quality. This approach will also reduce burden on institutions by precluding the need for repeated callbacks from NCES contractors. We believe it is the institutions' responsibility to provide clean and edited data. To assist institutions in fulfilling this responsibility, the system shall provide institutions with immediate feedback on the quality of their data. Thus, we recommend that the system be capable of having the previous year's data loaded and editing and other quality checks built in. We also recommend that if institutions cannot resolve edit failures, fields for explanations of failed edits be provided, and that no data be accepted by NCES until all edit failures have been resolved.

The Web-based system should have capability to allow file import at the institutional as well as state level. NCES should provide specifications for ASCII file structure and encourage sharing of other mechanisms developed by institutions or states using such software as Excel and Lotus. Moreover, NCES should work with software vendors that process data for institutions and state agencies so that they can make any necessary modifications to their systems in a timely fashion in order to meet IPEDS reporting requirements. NCES should also add FAQ's, technical manuals, and user group discussions in the Web-based system to share experience and innovative ideas.

We recognize that it is absolutely essential that the system work correctly and smoothly. To ensure the success of the system, it shall be thoroughly tested and evaluated, particularly the data entry and edit software, before it is moved to full-scale implementation. Data edit checks shall also be carefully evaluated before they are built into the system so that the most important errors are caught without overwhelming the Web instrument. Adequate resources, both staffing and funds, are critical for the development and testing of the system.

We also recognize that some small non-Title IV institutions may not have access to the Internet or the capacity to provide data through the Web-based system. (All Title IV institutions are required to have Internet access to post financial aid information and thus

should have the capability.) NCES shall provide technical and administrative assistance to these institutions until they build up their capacity. The number of such institutions is expected to be small, but nonetheless they are important to IPEDS in achieving comprehensive and complete data about postsecondary education in this country.

Recommendation 3b. *The current IPEDS coordination system shall be maintained and the Web-based system shall accommodate the current coordination practices.*

The coordination practices for IPEDS data submission vary by state. In most states, most public institutions generate their own reports and then send them to the state IPEDS coordinator who then submits the reports to NCES. However, there are states where an institution system office generates the report for each institution in the system and then submits the reports to the state IPEDS coordinator, or the state coordinator generates the report for all coordinated institutions. These existing practices should be maintained to preserve the unique working relationships among various parties. To achieve this goal, we recommend that IPEDS state coordinators, system coordinators, and institution coordinators be provided with their own passwords to access the survey forms of institutions they are generating data for or are coordinating, and be able to enter or review the data until the forms are finally submitted to NCES. Institutions that supply their own data may submit the data directly to NCES or to state/system coordinators for additional, value-added reviews. For states that generate reports for their coordinated institutions centrally, the state coordinators give institutions a chance to review their data before the data are sent to NCES.

4. Data Content

There have been many suggestions, some of them conflicting, for changes in data content. General guidelines for deciding on new items were the need for the data, the usefulness of the data, and institutions' ability to provide the data accurately and consistently. In other words, items must be relevant and of high quality. The same guidelines were also applied to the evaluation of existing IPEDS data items. Any items that did not meet these guidelines were recommended for deletion. Most of the following recommendations were suggested by the NPEC working group on students and were made available for review by the general postsecondary education community.

Addition and deletion of items may take place at different times. The suggested dates are indicated in braces at the end of each suggested change and summarized in Section II.C.1.

Recommendation 4a: *The October Collection shall collect the following data elements with a few additions and deletions:*

- *Institutional characteristics (IC), including price information (tuition and fees for the current year).*
- *Completions -- Total count for each award level by 6-digit CIP code; by gender and by race/ethnicity (previous year).*

Additions to IC:

Because of congressional interest in selectivity and freshmen profile data, we recommend that IPEDS include the following items in the Institutional Characteristics survey. (Some of these items are also collected by the Common Data Set.)

- A screening item that asks whether the institution has an open admission policy for all or most students. If the institution indicates they have such an open-admission policy, they would not supply data for the other two items. The second item would ask for the number of applications, admissions, and enrolled students for the first-time full-time cohort, by gender. The third item would ask for the percentage and the number of students submitting SAT/ACT scores and the 25th and 75th percentile scores for each test. However, if the institution does not require test scores for admission or if fewer than 60 percent of students in the entering cohort submitted scores for a given test, the percentile scores for that test would not be reported. All data would be for the prior fall's entering class and would include new students admitted the summer prior to that fall. {optional in 2001-2002}

- Check-off items that ask whether the institution accepts 1) dual credit (college credits earned while in high school), 2) credit for life experiences, 3) advanced placement credits. {optional in 2001-2002}

- Check-off items that ask whether the institution offers any of the following: 1) ROTC, 2) study abroad, 3) accelerated programs (e.g., on weekends), 4) distance learning opportunities. {optional in 2001-2002}

- Check-off items that ask whether the institution has special curricular offerings (credit or non-credit) designed for students who 1) have Limited English Proficiency (English as a Second Language), 2) are visually impaired, 3) are hearing impaired, 4) are learning disabled, 5) are developmentally delayed. {optional in 2001-2002}

- New options to item C5 on the current paper form, which asks about the presence of various admission requirements: secondary school GPA, secondary school rank, secondary school record, college-preparatory program in secondary school, recommendations, formal demonstration of competencies (e.g., portfolios, certificates of mastery, assessment instruments). New response categories will also be added: 1) required, 2) recommended, 3) neither required nor recommended, 4) don't know. {implemented in 2000-2001}

- An item on policies for students from non-regionally accredited high schools (e.g., home schools) in yes/no response categories. {optional in 2001-2002}

- Price categories from the Institutional Price and Student Financial Aid (IPSFA) survey. {implemented in 2000-2221}

Deletions from IC:

- The following items in the current Institutional Characteristics Survey shall be deleted: 1) locations where courses offered; 2) facilities where courses offered; 3) whether courses offered at military installations; 4) modes of instruction; 5) institutional eligibility for federal financial aid programs; and 6) items on JTPA participation. {implemented in 2000-2001}

- Unduplicated headcount items and all credit/contact hours items with a few deletions shall be moved to the December Collection. {implemented in 2000-2001}

- Three items in C8 -- services for visually, hearing, and mobility impaired. {implemented in 2000-2001}

Additions to Completions:

- Data on *multiple majors.* Because of interest, primarily at four-year institutions, in providing more complete information about graduates with multiple majors (e.g., dual or split majors), a new table shall be added to the Completions Survey to provide data by CIP code, gender, and race/ethnicity for additional undergraduate majors not already reported in Part A of the current paper survey. Institutions that do not have multiple majors would not complete the new table. This is actually an expansion of Part B of the current paper survey — clarifying Questions, which asks for total double majors by degree level and gender. Instructions would be modified to reflect the changes and indicate that minors and secondary concentrations should not be treated as multiple majors. {optional in 2001-2002}

Recommendation 4b: *The December Collection shall collect the following data elements with a few additions and deletions:*

- *Full-year unduplicated enrollments -- unduplicated headcount for a 12-month period in previous year, by gender and race/ethnicity, and by level of enrollment for prior year if applicable.*
- *Full year unduplicated headcount of first-time full-time students over a 12-month period for less-than-4-year institutions for prior year.*
- *Credit/contact hour activity for a 12-month period in previous year.*
- *Fall enrollment (current year) by gender and race/ethnicity.*
- *Fall enrollment (current year) by age and by residence status (mandatory in alternating years).*
- *Fall staff (current year) (a revised classification framework will be adopted, see Recommendation 6).*

- *Faculty salaries (current year) (a revised classification framework for faculty will be adopted, see Recommendation 6).*

Additions to Fall Enrollment Survey:

- *Non-credit activity.* In response to requests from two-year institutions to track growing non-credit activity, prior-year data about non-credit courses will be added for two-year institutions for which "non-credit instruction constitutes an important part of the institution's educational offerings (as determined by institutions)." The new item would request the number of non-credit courses and the corresponding contact hours for 1) courses for workforce development and 2) other non-credit courses. "Workforce development" will need to be defined. {optional in 2001-2002}

- *Percent of entering class represented by Graduation Rate Survey cohort.* In response to requests from a number of institutions for whom the GRS cohort is not representative of their entire entering class, a clarifying question would be added to future Graduation Rate Surveys to indicate the proportion of the entire undergraduate entering class represented by the GRS cohort. To facilitate computing such a percentage, the Fall Enrollment Survey includes an item that asks for the total (full-time plus part-time) undergraduate entering class. This number would appear on the appropriate subsequent Web-based GRS along with the associated percentage. {optional in 2001-2002}

- *Instructions:* The fall enrollment survey will make it even clearer that the first-time student categories (freshman, graduate, and professional) should include students enrolled in the fall term who attended the institution at that level for the first time in any term in the prior summer. Instructions will make it clearer that students who study abroad and pay tuition to the institution and students enrolled in off-campus locations (including prisons, hospitals, employer sites, and off campus through technology-mediated courses) should be included. {implemented in 2000-2001}

- Sections of the Fall Enrollment Survey (*age and residence data*) that are collected every other year will continue to be required only every other year (in order to keep work for institutions that enter such data by hand from increasing). However, the system will allow these data to be uploaded even in those years in which they are not required (so institutions can avoid having to modify programs annually to account for the changes), but non-responses will not be imputed when data are not mandatory. {implemented in 2000-2001}

Deletions from Fall Enrollment Survey:

- The entire survey of Fall Enrollment in Occupationally Specific Programs. This survey has been included in IPEDS since 1986. The data are duplicated counts of enrollment and are not related to program completions. Also, the data have not been released because of their poor quality. There have been very few requests for the data. Moreover, the data are collected primarily for the Office of Vocational

and Adult Education, but the Office has indicated that it does not use the data. However, a few states indicated the need for these data. While their use of the data alone may not warrant collection from all institutions in the country, certain items could be further evaluated through the NPEC working group and the voluntary peer analysis system discussed in Recommendation 4e. {implemented in 2000-2001; the survey was also not sent in 1999-2000}

- The following clarifying questions from Part D of the Fall Enrollment Survey :
  D1 (on number of students enrolled in remedial courses)
  D2 (on number of students enrolled in extension division)
  D4, D5, D6 (on first-time transfers, first-time graduates, and first-time first-professional students by in-state, out-of-state, and out-of-country).
  {implemented in 2000-2001}

Changes in staff and faculty salaries surveys

The NPEC IPEDS Faculty/Staff Review Working Group has identified several issues in the Staff and Faculty Salaries surveys, and developed a series of matrices (i.e., classification framework) and guidelines. They are described in Recommendations 6a and 6b. {The resulting changes will be implemented as optional in 2001-2002 and become required in 2002-2003}.

Recommendation 4c: *The March Collection shall collect the following data elements:*

- *Student financial aid -- average amount of financial assistance by type, and number of students receiving financial assistance for the previous year plus contextual items {implemented in 2000-2001}*
- *Institutional finance (previous year).*
- *Graduation rates.*

We do not recommend any new items nor any deletions to these components. However, the finance data will be reported under standards and guidelines of GASB for public institutions and FASB for private institutions as required.

Recommendation 4d. *For the minimal data set, NCES shall simply focus on (1) the directory information such as mission, date established, name, address, phone, e-mail address, Web address, control, level, accreditation status; and (2) basic institutional characteristics such as number of students enrolled (by sex and race/ethnicity), number of awards by program, number of faculty/staff, tuition and fees.* {implemented in 2000-2001}

As indicated earlier, some non-Title IV institutions may not respond to the full data collection through the Web-based system. These institutions shall be contacted to collect minimal data in paper form. These data present primarily the kind of market information that the general public will find useful and helpful. They will be posted on the Web page developed for each institution (discussed below).

Recommendation 4e. *NCES shall continue working with institutions to develop and select new items that are relevant and useful to institutions.*

In addition to those additions and changes stated above, many other items were suggested and discussed. However, due to the wide variation in definitions, quality, and availability, they are recommended for further study and evaluation. Examples of some of these items are listed below.

- Graduation rates over a longer period of time (e.g., up to 10 years), which would be relevant for urban and two-year institutions.
- Student intent (for community colleges).
- Residence by state for graduate and first-professional students.
- Technology-related items, particularly items that relate to the mode of delivery and location of courses (where the course is taught and/or where the student is located).
- Occupationally related data.

NCES shall employ various mechanisms to explore the feasibility of collecting data on such items. We recommend that NCES continue to convene working groups consisting of representatives from institutions to develop new items to meet thedata needs of the postsecondary education community. Any new items recommended by working groups should be carefully field-tested and phased in so that institutions would be able to provide quality data.

5. Reporting by new race/ethnicity codes

In October 1997, the Office of Management and Budget (OMB) issued new standards for collecting and reporting race/ethnicity data from individuals on all federal surveys. The new standards require that ethnicity (Hispanic/Latino versus non-Hispanic/Latino) be reported independently from race, and that respondents also be instructed to select one or more race classifications from five categories: American Indian/Alaska Native, Asian, black/African American, Native Hawaiian/other Pacific Islander, white.

To collect data from individuals, institutions may use a two-question or a single question format. The two-question format is:

1. Which best describes you? (Choose one)
    a. Hispanic/Latino
    b. non-Hispanic/Latino
2. Which of these best describes your background? (Choose one or more)
    a. American Indian/Alaska Native
    b. Asian
    c. Black/African American
    d. Native Hawaiian/other Pacific Islander
    e. White

The one-question format is:

Which of these best describes your background? (Choose one or more)

a. Hispanic/Latino
b. American Indian/Alaska Native
c. Asian
d. Black/African American
e. Native Hawaiian/other Pacific Islander
f. White

Because each individual may select one or more race categories, the number of possible race categories becomes very large. That presents a problem for reporting IPEDS aggregate data by race/ethnicity categories.

Recommendation 5. *Among many possible combinations, we recommend that NCES adopt the 16 race/ethnicity categories recommended by the NPEC/NCES/NSF Policy Panel on Racial/Ethnic Reporting to report aggregated data for the Fall Enrollment Survey, the Completion Survey, the Fall Staff Survey, and the Graduation Rate Survey. These 16 categories are listed below.* {optional in 2000-2001, 2001-2002, required in 2002-2003}

1. Non-resident aliens

U.S. citizens and resident aliens

2. Unknown race/ethnicity
3. American Indian/Alaska Native only
4. Asian only
5. Black/African American only
6. Native Hawaiian & other Pacific Islander only
7. White only
8. Hispanic/Latino only
9. Hispanic/Latino and one or more races
10. Non-Hispanic/Latino and more than one race

Computed unduplicated total count (sum of 1 through 10 above)

11. American Indian/Alaska Native alone or in combination
12. Asian alone or in combination
13. Black/African American alone or in combination
14. Native Hawaiian/other Pacific Islander alone or in combination
15. White alone or in combination
16. Hispanic/Latino alone or in combination

Categories 11 through 16 are for reporting maximum counts of individuals with a particular racial/ethnic background. For example, "white alone or in combination" includes all individuals who report "white only" and white and any other race/ethnicity.

6. Classification of institutional employees

Recommendation 6a: *NCES shall adopt the framework for reporting institutional employee data recommended by the NPEC Working Group on Faculty.* {optional in 2001-2002}

There are numerous ways to classify institutional employees. We recommend that NCES adopt the framework and guidelines developed by the NPEC Working Group on Faculty. The framework and guidelines will help institutions provide data consistent with institutional definitions of faculty and will increase the analytical ability to compare various populations across institutions.

The framework cross-classifies all employees by employee's faculty status and occupational/functional categories. Faculty status categories include:

Faculty
- Tenured
- Tenure track
- Not on tenure track

Non-faculty
Graduate assistants (included only in part-time employees only)

Occupational/functional categories include:

Instruction/research/public service
- Instruction combined with research and/or public service
- Primarily instruction
- Primarily research
- Primarily public service (e.g., extension)

Executive/administrative/managerial
Other administrative
Other professional (e.g., librarians)
Technical/paraprofessional
Clerical and secretarial
Skilled crafts
Service/maintenance

These two variables will form a matrix for classifying employees. Separate matrices are proposed to distinguish full-time employees from part-time employees. Data on medical schools will be collected in separate rows for full-time and part-time employees. These matrices would categorize all paid employees and students in the College Work Study Program into one and only one category. Casual employees are those hired on an ad-hoc or occasional basis to meet a short-term need for extra help.

An additional matrix was proposed to depict who is teaching regardless of titles or funding source, sorted by full-/part-time and faculty status (part-time instructional staff shall include graduate assistants as a category).

For all cells in each matrix, definitions, decision rules, and guidelines will be developed to help data providers to ensure data consistency and comparability.

Salaries for employees in the "Instruction/research/public service" categories will be reported on the Faculty Salaries Survey.

Recommendation 6b. *NCES shall continue to explore a measure of instructional activity/work load.* {optional in 2001-2002}

The data on who is teaching mentioned above will be new. While the head count itself is useful and informative, it will be more useful to have a related activity measure such as total credits taught, number of classes taught, etc. The problem is that no single acceptable measure has been identified. We recommend that the NPEC working groups and institutions continue to develop possible measures of instructional activity/workload for IPEDS reporting. NCES through NPEC working group should survey institutions to find out what is currently being done by states. Any recommended measures could be field tested through the voluntary peer analysis systems (VIOLIN) discussed in Recommendation 10b.

7. Data analysis and dissemination

Recommendation 7: *NCES shall develop and maintain a peer analysis system to facilitate comparative analyses of IPEDS data by institutions and other users, a Web page on which consumer information for each institution can be disseminated by NCES to the general public, and a system to select and link data from various components of IPEDS for statistical analyses. These systems shall be accessible to persons with disabilities.* {to be implemented in 2000-2001}

A critical feature of a good data system is its utility to the largest number of users. Moreover, when IPEDS data are perceived as relevant and useful to a wide variety of users, institutions will be more likely to provide high quality data to IPEDS. Thus, we recommend that NCES undertake the following actions to facilitate the use of IPEDS data:

a. Develop and maintain a peer analysis system to allow institutions to do comparative analyses as soon as the data have passed edit checks and have been locked by IPEDS coordinators and state coordinators, and proper measures for protecting confidentiality of certain data items have been made by NCES. The system shall enable analysts/researchers to easily identify or select peer institutions and then abstract and present data of interest.

b. Develop a Web page for each institution that presents basic information from IPEDS that will be of interest to the general public, particularly parents and students who are searching for institutions.

c. Develop and release a final IPEDS data set that allows users to generate unbiased aggregates for certain groups at the state, regional, or national level. Provide computer software that will enable users to identify, select, and extract data of interest quickly and easily from various data files. An example of such software is the Electronic Code Book used by several

other NCES data systems such as NELS:88 and NPSAS. Such software should be added to the raw data files released on CD-ROMs or the NCES Web site.

d. Provide software on-line that allows users to specify the kind of statistical tables needed and then generate the tables promptly.

e. Compile statistical tables that are widely used (e.g., tables in the Digest of Education Statistics) and post them on the NCES Web site to allow easy access and retrieval for quick reference by various types of users.

8. Communication with data providers and stakeholders

Recommendation 8: *NCES shall employ multiple approaches to maintain effective communication with institution chief executive officers, institution and state IPEDS data providers, and data users in the postsecondary education community.*

To encourage use of data and to receive feedback from users for improvement, an effective and efficient communication mechanism must be established. NCES shall continue its effort to reach out to IPEDS data providers and users as well as organizations that conduct surveys of postsecondary education. Specific actions include:

- Routinely post relevant IPEDS information on the NCES Web site and through other organizations' communication mechanisms. The Web site shall also encourage and facilitate dialogue among IPEDS data users.
- Institutionalize focus groups and conferences of data providers and users through the National Postsecondary Education Cooperative System.
- Establish a Web/Internet based discussion group for IPEDS to reach out to other individuals and promote conversation and exchange of ideas, experience, and support.
- Continue to enhance communication with state agencies through SHEEO/NCES Communications Network.

NCES shall continue to solicit assistance and expertise available from the Association for Institutional Research (AIR) and other postsecondary education associations. This is particularly valuable in communicating with individual institutions and state agencies that are responsible for submitting IPEDS data, and disseminating information and providing technical assistance to data providers and users. NPEC is an excellent example. Its IPEDS working groups have been very productive and thoughtful, and have provided valuable input to the redesign of IPEDS.

9. Technical assistance to institutions

The new IPEDS will employ state-of-the-art technologies for data collection and analyses. NCES shall be proactive in assisting IPEDS data providers and users, including software vendors, in developing their capability to use the new technologies. This will enhance the efficiency of IPEDS data collection and data quality, and increase the use of IPEDS data for policy and management decisions. To this end, we present the following recommendations.

Recommendation 9a. *During each data collection period, NCES shall provide HELP desk support for respondents.*

This HELP desk shall be able to answer any questions or inquiries regarding data submission and the operation of the Web-based system over the phone or by e-mail. Such help shall be available during normal working hours across the country, and all questions and answers shall be documented for future reference and will form the basis for developing additional on-line assistance.

Recommendation 9b. *NCES shall provide administrative assistance to institutions that do not have access to the Internet or the capacity to provide data through the Web-based system.*

Some small institutions may not have access to or capacity to use the Web-based IPEDS system. To these institutions, NCES shall provide administrative assistance in helping transfer data submitted through paper forms to the computer. We believe the number of this type of institution is small, but it is important to include these institutions in order to have complete and comprehensive coverage of postsecondary education institutions.

Recommendation 9c. *NCES shall conduct or support training workshops for institution and state IPEDS coordinators (keyholders) to become fully conversant with the Web-based system for data collection and analysis.*

In making the transition from the paper-based collection to a Web-based collection, we understand that there is always some anxiety and uncertainty in working with a new system. To ease the transition, NCES shall conduct training workshops to assist institution and state IPEDS data providers to become fully versed with the system. We recommend that NCES train the trainers first and then support these trainers of institution IPEDS data providers at various sites throughout the country. NCES shall also conduct preference workshops at the association and NCES/SHEEO Network annual meetings, and solicit assistance from associations of postsecondary education to reach out to all institutions.

Recommendation 9d. *NCES shall develop an on-line tutorial program for data providers to get answers or instructions for performing certain tasks with the Web-based system.*

Recommendation 9e. *NCES shall establish the IPEDS Fellows Program.*

NCES shall establish an IPEDS Fellows Program to select individuals who have received certificates of expertise in IPEDS to spend a year or two at NCES actually working on IPEDS projects. This arrangement will help those fellows to become truly experienced IPEDS experts who in turn can help train other IPEDS data providers and users, and thereby relieve some of the workload of IPEDS staff. This has the potential to be a win-win program.

10. Collaboration with institutional data developers

Recommendation 10a: *NCES shall support NPEC's initiative to coordinate and collaborate with other major postsecondary education data developers to reduce the overall response burden to institutions.*

IPEDS is the most comprehensive data system on postsecondary education in the nation. Many people in federal, state, and local government offices, academic institutions, and the general public use the data. However, for various reasons, many state educational agencies, accreditation agencies, professional associations, other federal agencies, and private industries also collect data from postsecondary education institutions. NPEC has identified over 100 organizations that collect data from postsecondary institutions. These data collections often result in inconsistent data and impose undue burden on institutions. To reduce these problems, we recommend that NCES support NPEC's project on Accessing Survey Resources. This project will identify information among the various data developers and discuss methods for using consistent definitions for data elements, coordinating the timing of data collection, and using IPEDS and other quality data bases for their needs.

Recommendation 10b: *NCES shall support the Voluntary Institution On-Line Information Network (VIOLIN), a voluntary peer analysis system, to reduce the overall response burden to institutions and serve as a test platform for IPEDS item development. {to be implemented in 2001-2002 if funds are available}*

As indicated above, there are surveys by associations and private industries that attempt to collect data from institutions. Many of their items are similar in nature or duplicative. To reduce the duplication and thus reduce the overall burden to institutions, it would be valuable to put data on these items in one central source together with IPEDS data from which all interested parties can extract the data they need. This concept has been discussed with the postsecondary community. It was suggested that NCES, through cooperative arrangements, support VIOLIN, a voluntary peer analysis system, that uses IPEDS Web-based software to collect and process data on selected items by institutions on a voluntary basis. These data will be integrated with IPEDS data and will be accessible only to participating institutions for a pre-determined period of time before they are released to the general public. This approach will help eliminate duplication of data collection from other major developers of postsecondary education data and hence reduce the overall burden to institutions. NCES shall encourage these data developers to extract as much data from this voluntary data set as possible.

Through cooperative arrangements, a governing board with broad representation from the postsecondary community could be formed to provide guidance and to select items for the system. At the initial stage, items included in the following surveys can be considered:

- Common Data Set
- Surveys conducted by professional associations (e.g., NACUBO endowment survey, CFAE fundraising)
- Data for two-year institutions (expanded use of CEUs, expenditures, and staffing for non-credit courses)

This system could also provide a test platform for IPEDS item development. When any items included in the voluntary data set become well accepted, they can be considered for addition to IPEDS and become a part of the core database such that data from all institutions would be available.

11. On-going enhancement process

Recommendation 11: *NCES shall adopt a process of continuous improvement for the IPEDS system.*

IPEDS redesign shall be an on-going process to refine and improve certain processes of data collection, analysis, and dissemination in addition to identifying new data items to meet future data needs of the postsecondary community as mentioned earlier. NCES shall proactively and routinely solicit comments and suggestions from data providers and users through various mechanisms such as work groups, conferences, hearing sessions at association meetings, a Web-based discussion, and customer surveys. For IPEDS to be effective, it must be dynamic, incorporating improvements and responding to the needs of the postsecondary education community while maintaining the continuity of trend data.

B. How would issues of concern for redesign be addressed by the new IPEDS?

The changes or modifications recommended in the preceding section will address various concerns about IPEDS. To fully appreciate their impact, specific changes or modifications meeting each concern are summarized below. The summary also explains why piecemeal improvement of IPEDS is not sufficient and why all interrelated changes should be made in the recommended time frame in order to achieve the goals of IPEDS redesign.

1. Data requirements

   a. Reporting by new race codes beginning in 2000-2001 as optional and becoming a standard requirement in the 2002-2003 year.
   b. Using a new finance survey form for public institutions under standards by GASB .
   c. Adding new data items such as price and student aid requirements to IPEDS to meet Congressional mandates.
   d. Implementing new CIP codes for the 2002-2003 completions, collected in 2003-2004

2. Timeliness of data

   a. Using Web-based data collection with built-in edit checks to process the data at the time when they are entered into the system. This will reduce the time required for traditional processing, and the overall time for completing the data collection (an eight-week window for data submission).
   b. Accessing data for peer analysis about a week after the data have been submitted to NCES.

3. Relevance of data

   a. Covering all Title-IV institutions and all other postsecondary institutions that are open to the general public.
   b. Collecting at least a minimum amount of data from all covered institutions.
   c. Adding data items that are deemed useful to institutions.
   d. Deleting items that are no longer relevant.

4. Quality of data

   a. Providing new ways of classifying institution employees so that consistent data will be produced by the Fall Staff, Salaries, and the National Study of Postsecondary Faculty.
   b. Requiring front-end data editing as data are being entered.
   c. Training workshops for IPEDS coordinators to further their understanding of IPEDS data and their submission mechanism.
   d. Making clear definitions for data items available immediately through a "HELP" key in the Web-based system.
   e. Improving instructions and definitions.

5. Efficiency of data collection

   a. Redesigning survey forms and due dates by data availability.
   b. Using Web-based data collection and processing mechanisms.

6. Utility of data: Improving data use and dissemination

   a. Producing Electronic Code Book (ECB) data files to improve accessibility of IPEDS data for statistical analyses.
   b. Creating a peer analysis system to facilitate comparisons among peer institutions.
   c. Enhancing the College Opportunity On Line system (COOL).
   d. Enhancing communications to inform users and data providers of IPEDS uses.
   e. Conducting training seminars to assist users and data providers.
   f. Making the system accessible to persons with disabilities.
   g. Initiating IPEDS fellows program.

7. Communication and collaboration

   a. Enhancing communications with users and data providers.
   b. Strengthening relationships with other data developers.

C. Implementation Schedule and Resources Required

1. Schedule:

Using one form of data collection rather than multiple forms is cost-effective. Thus, we recommend that, if funds are available, NCES change the paper-based collection to a Web-based collection in the 2000-2001 survey. However, the new data items and reporting format (e.g., reporting by race code), will be phased in over three years so that institutions will have sufficient lead time to change their data collection system and NCES can refine the computer system. This schedule also gives NCES time to test the systems fully before implementation. All new items or formats shall be pilot-tested, either using the first time data collection as a field test or conducting a separate field test to examine the availability of the data, their quality, and problems. This process is particularly needed for the less-than-two-year institutions. Specifically, schedules for various data additions, deletions, and changes are listed below.

1999-2000	The current surveys in paper form (and existing electronic methods) with some changes in schedule were implemented. The survey of Fall Enrollment in Occupationally Specific Programs was dropped. Institutional Price and Student Financial Aid (IPSFA) was implemented. Training on Web-based collection will be continued.
2000-2001	All three waves of data collection will be Web-based. Peer analysis system and College Opportunities On Line (COOL) will be fully implemented. Minimal data will be collected from non-Title IV institutions that do not respond to the full surveys. All item deletions and modifications and instruction clarification will be implemented. Only the data existing in the 1999-2000 paper forms will be required on the Web-based surveys. Institutional price and student financial aid items from IPSFA will be required. Both old and new race/ethnicity codes will be available in the Web-based system, but the reporting of new race/ethnicity codes will be optional.
2001-2002	All new items, including check-off items, will be added to the system, but responses to these items are optional. Staff and faculty salaries under new classification categories will be optional. New race/ethnicity reporting will be optional. IPEDS fellows program will be initiated.
2002-2003	New race/ethnicity reporting required for fall enrollment. Finance survey for public institutions under new GASB standards will be implemented as required.

2003-2004 New race/ethnicity codes will be required for Fall Staff and Completions (for awards granted in 2002-2003).
New CIP codes used for reporting 2002-2003 completers.

2. Resources:

a. Fiscal and Human Resources Required

As described in the preceding sections, the proposed revision of IPEDS is quite extensive. It requires the reconfiguration of survey components according to the time data become available at institutions as well as by subject topics such as enrollment and finance. The redesign also requires the development of Web-based systems to collect, process, analyze, and disseminate data. Finally, the design calls for technical assistance to institutions and states in making the transition from a paper-based to a Web-based system.

To successfully implement the new IPEDS, a strategic capital investment will be required over the next three years to develop the new system. NCES will also need additional staff to monitor and direct this development. Without adequate support, the quality of the new system will be compromised, and IPEDS might not achieve its stated goals for excellence and timeliness.

Once the system has been developed, the overall maintenance and operation costs in subsequent years will be lower than the initial costs. The savings then could be directed to the analysis and dissemination of IPEDS data, making the information even more valuable and useful to policymaking and research than ever before.

Based on the current project experience at NCES, it is estimated that $5 million and four additional full-time staff members will be needed for the development of systems and for technical assistance. These estimates are based on the following tasks to be performed: (1) developing a Web-based system for each of the three waves of data collection, (2) developing the peer analysis system and other on-line analysis mechanisms, (3) developing and maintaining a Web page for each institution, (4) developing and maintaining on-line tutorial assistance to data providers, (5) creating technical training workshops for data providers and users, (6) updating the institutional universe (including area search) and alternative data submission for non-respondents, and (7) directing and monitoring contractors.

b. Assistance from Contractors

Most of the development work will be done by specialists outside of NCES because NCES does not have such specialists in house. To procure such assistance, NCES will need a contractor specialized in computer system development to create the Web-based system and up to three survey contractors to administer the three waves of data collection. In addition, a contractor will be needed to handle administrative assistance to institutions for alternative submission, evaluation of the institutional universe, and collection and processing of the minimum data set.

III. Alternative Options to the New IPEDS

The recommended (preferred) option is a Web-based system. All data collection, processing, and analysis recommendations are based on the assumption that the required computer software for IPEDS will be developed promptly. The development of such software and related technical assistance will need fiscal and non-fiscal resources as described in the preceding section. If for some reasons the required resources are not available, NCES may take the following less desirable options:

Option 1. *Reduce all IPEDS paper-based data collection to only a Web-based version of the Survey of Institutional Characteristics, plus a few key data elements such as total enrollment, total degrees conferred, total revenues and expenditures, and graduation rates. Other data would not be collected.*

This approach would provide minimal timely data. It would continue to provide directory information for the general public and for sample selection for studies involving postsecondary education institutions, and to generate only certain broad measures of postsecondary education. This approach would partially address the timeliness, burden, and cost issues. However, no comprehensive data about postsecondary education would be available to report on the condition of postsecondary education in the United States, and IPEDS could not satisfy its various mandates.

Option 2. *Continue the current paper-based system with a few minor additions and deletions of data elements.*

This approach would provide comprehensive data and these data would not be timely. It would be able to address the concerns about data relevance and the mandated data requirements. However, the data would not be timely because the data collection, editing, and imputation processes would continue to be cumbersome, not taking advantage of current technology. Moreover, the redesign process has raised expectations in the community for better and more timely data. If these expectations were not met, it would be difficult to maintain the cooperative spirit engendered by the hope for better information.

Option 3. *Postpone the implementation of the entire new system until resources become available.*

Although an incremental approach whereby one data collection component of the three recommended components is converted to a Web-based system each year could reduce the financial resources needed, we do not recommend this approach. This approach would severely limit the development of other recommended systems such as the peer analysis tool that create incentives for institutional participation. It also could result in additional burden to institutions because they would have to develop the capability to respond via the Web while also maintaining their paper systems, and it could require additional staff resources for processing two different systems. NCES would also require additional staff resources to administer these different systems.

Thus, an alternative to the recommended option is to delay the implementation of new IPEDS, and continue the current IPEDS system for another year or two but communicate clearly to the postsecondary education community the reason for the delay. It is NCES's ultimate goal to provide timely, high quality, and relevant IPEDS data while minimizing burden to institutions, and to make the data easily accessible and highly useful to policymakers, researchers, and the general public.

Attachments

Attachment A. Statutory data requirements for IPEDS

IPEDS was launched in 1986. It integrates the collection of institution-level data from all institutions whose primary purpose is to provide postsecondary education programs and that are open to the general public. These institutions include four-year colleges and universities, two-year colleges, and less-than-two-year vocational/technical institutions in this country. Prior to IPEDS, the institution-level data were collected through three separate systems: the Higher Education General Information Survey (HEGIS), the Survey of Non-Collegiate Postsecondary Institutions (SNPI), and the Vocational Education Data System (VEDS) that collected data directly from states.

IPEDS was initiated to address technical problems and requirements of HEGIS, SNPI, and VEDS and simultaneously satisfy the various statutory data requirements specified by the following laws or regulations:

- The National Education Statistics Act of 1994 (PL 103-382, Sec.404(a)). This legislation states that "The duties of the Center are to collect, analyze, and disseminate statistics and other information related to education in the United States and in other nations…." Under this mandate, IPEDS provides data that can be used to describe the condition and progress of education at the postsecondary level.
- Section 421(a)(1) of the Carl D. Perkins Vocation Education Act. Pursuant to this legislation, IPEDS provides data on vocational students, programs, program completions, and program enrollment from those postsecondary institutions known to provide occupationally specific vocational education. This legislation also mandates the collection of racial/ethnic data for vocational programs.
- Title VI of the Civil Rights Act of 1964 (34 CFR 100.13) and Title IX of the Education Amendments Act of 1972. The collection and reporting of racial/ethnic data on students are mandatory for all institutions that receive, are applicants for, or expect to be applicants for federal financial assistance as defined in the Department of Education (ED) regulations implementing Title VI of the Civil Rights Act of 1964 (34 CFR 100.13), or defined in any ED regulation implementing Title IX of the Education Amendments Act of 1972.
- Section 406 of the General Education Provisions Act, as amended by PL 100-297, the Hawkins-Stafford Elementary and Secondary School Improvement Amendments of 1988. It requires NCES to collect data from libraries. IPEDS collects data from academic libraries on a biennial basis.
- Section 490 of the Higher Education Amendments of 1992 (PL 102-325). It requires that "the institutions will complete surveys conducted as a part of the Integrated Postsecondary Education Data System (IPEDS) … in a timely manner and to the satisfaction of the Secretary". Under this mandate, any institutions which participate in or are applicants for participation in any federal financial assistance program authorized by Title IV of the Higher Education Act of 1965, as amended (20 U.S.C. 1094(a)(17)), are required to respond IPEDS.
- The Higher Education Amendments of 1998. The Higher Education Amendments of 1998 include a requirement that the Commissioner of Education Statistics develop a

uniform methodology for reporting the cost of postsecondary education for undergraduate students. In particular, standard definitions must be developed for tuition and fees, price of attendance (i.e., student expenses), average financial aid by type of assistance (i.e., federal grants, state grants, institutional grants, and loans), and the number of students receiving each of these types of assistance.

- Title VI of the Civil Rights Act of 1964 (34 CFR 100.12), and Public Law 88-352, Title VII of the Civil Rights Act of 1964, as amended by the Equal Employment Opportunity Act of 1972 (29 CFR 1602, subparts O, P, and Q). Under these Acts, the collection and reporting of racial/ethnic data on the fall staff are mandatory for all institutions which receive, are applicants for, or expect to be applicants for federal financial assistance.
- Student Right-to-Know Act. Sections 668.41, 668.46, and 668.49 of the Student Assistance General Provision were developed to implement the Student Right-to-Know Act, as amended by the Higher Education Amendments of 1991 and further by the Higher Education Technical Amendments of 1993 and the Higher Education Amendments of 1998. These final regulations require an institution that participates in any student financial assistance program under Title IV of the Higher Education Act of 1965, as amended, to disclose information about graduation or completion rates to current and prospective students.

Attachment B. Current Components of IPEDS

- Institutional Characteristics (IC): the level and control of institution, accreditation, tuition and required fees, room and board charges, unduplicated headcount for 12-month period, number of credit hours awarded over a 12-month period, and admission criteria.
- Fall Enrollment (and Compliance Report) (EF): the number of students enrolled in the fall by race/ethnicity, gender, attendance status, and level; state of residence of first-time undergraduates by year of high school graduation (previous academic year or other time); and age of students by level and gender.
- Fall Enrollment in Occupationally Specific Programs (EP): the number of students enrolled in occupationally specific programs by detailed program, gender, and race/ethnicity.
- Completion (and Compliance Report) (C): the number of degrees and other formal awards conferred by institution by level of degree or other formal award, detailed program, and gender and race/ethnicity of recipient.
- Finance (F): revenues by source, expenditures (expenses) by function, expenditures on financial aid by source of aid, total salary outlays by function.
- Salaries of Full-time Instructional Faculty (SA): total salary outlays for full-time instructional faculty by rank and gender, number of full-time instructional faculty by rank and gender.
- Fall Staff (S): the number of staff by occupational category, gender, and race/ethnicity; the number of faculty by salary categories, rank, gender, and race/ethnicity; the number of new faculty hires by gender, race/ethnicity.
- Academic Libraries (L): the number of, and information on, librarians and other professional staff; size of library collection by type of materials; library expenditures; and information on electronic services.

- Graduation Rate Survey (GRS): the number of completers from a specified first-time, full-time undergraduate cohort by time to completion, and by race/ethnicity and gender of completers.

Attachment C. Externally mandated changes and additions to IPEDS

Although IPEDS has provided useful data on postsecondary education over the years, there are several forces pressing for the redesign of the system. First of all, there are externally mandated changes and additions to IPEDS. These include:

- Data related to student charges and financial aid. The Higher Education Amendments of 1998 include a requirement that the Commissioner of Education Statistics develop a uniform methodology for reporting the cost of postsecondary education for undergraduate students. In particular, standard definitions must be developed for tuition and fees, price of attendance (i.e., student expenses), average financial aid by type of assistance (i.e., federal grants, state grants, institutional grants, and loans), and the number of students receiving each of these types of assistance.

- New race and ethnicity codes. In October 1997, the Office of Management and Budget (OMB) issued new standards for collecting and reporting race/ethnicity data from individuals on all federal surveys. Currently race/ethnicity is reported using a single question with five categories of response: black, non-Hispanic; American Indian/Alaskan Native; Asian/Pacific Islander; Hispanic; and white, non-Hispanic, plus race/ethnicity unknown and nonresident alien. The new standards will require that ethnicity (Hispanic/Latino versus non-Hispanic/Latino) be reported independently from race and that respondents also be instructed to select one or more race classifications from five categories: American Indian/Alaska Native, Asian, black/African American, Native Hawaiian/other Pacific Islander, white.

- New finance form for public institutions. New standards relating to how private institutions report financial data were implemented for the IPEDS forms in 1997. Some of the changes included reporting tuition and fee revenue net of institutional aid, recognizing pledges as income at the time the pledge is made rather than when it is received, and allocating operations, maintenance, and depreciation to expenditure functions. The new standards mean that reporting is more complete in certain areas (e.g., depreciation). However, financial reports for private and public institutions are no longer comparable and time series data have been disrupted. It is anticipated that the Government Accounting Standards Board will issue new accounting standards for public institutions in 1999, with full implementation required for reporting IPEDS finance data for fiscal year 2003.

- Revised CIP codes and other changes. Changes to the CIP codes also will appear on IPEDS forms in 2001, although these will be minimal and the reporting will not be required until 2002-2003. Furthermore, an examination of definitions and instructions will be made to ensure they are consistent across IPEDS forms and also with other major non-IPEDS national studies.

Attachment D. Issues Examined in the Redesign of IPEDS

- Which institutions should be included in the system? Could they be classified into groups for the purpose of efficient data collection? If yes, then what data should be collected from each group?
- How and how soon can the externally mandated changes and additions be incorporated into IPEDS? How flexible is IPEDS? Can it respond to new mandates for content and quality?
- What problems are encountered in the current collection and dissemination of IPEDS data? What are solution options? How feasible and practical are the Web-based technologies for the collection and dissemination of data?
- What changes in IPEDS data contents are needed to meet the data needs of the postsecondary education community (i.e., adding or deleting items and/or surveys and modifying definitions and instructions)?
- What can NCES do to make IPEDS data timely for decision-making?
- How can NCES increase the utility of IPEDS data for managers, policymakers, decision-makers, and researchers? What can be done to make the system and data retrieval user-friendly?
- How can the quality of IPEDS data be maintained and improved?
- How can the reporting burden to institutions be kept to a minimum? Can it be reduced by the use of electronic submission of data, the judicious timing of survey collection instruments, the use of definitions that are consistent with other surveys, and coordination of federal and state collection efforts?
- What IPEDS data are used and what data are not used?
- What policy questions that could use IPEDS data cannot be fully addressed with the existing IPEDS data?
- At what level of detail are data needed?
- How important are data on occupational program enrollments, fall enrollment, full-and part-time students, and full-time-equivalent enrollment?
- Should IPEDS collect data on noncredit enrollment, and the unduplicated full-year count of students?
- What kind of data should IPEDS collect about the application and admission process?
- Is it appropriate to collect data about student outcomes using IPEDS? If so, are the current forms adequate to cover this area? What outcome data should or could be collected?
- How can student forms be redesigned to reflect changes in standards for reporting race/ethnicity of students?
- Are there other approaches for data collection that will reduce institutional burden?
- What roles do IPEDS state coordinators play?

Attachment E. Discussion of Issues, Origins, and Potential Solutions

E-1. Timeliness

The issue:

There is a perception in the postsecondary community that IPEDS data are not timely. The data from the current year of collection are not released within that same year for various reasons, including NCES data release processes as well as institutional and state data submission and reporting processes. For example, the collection of 1998 fall enrollment data and 1997-98 completion data began with the mailing of survey forms in July of 1998, but the data files won't be released until the fall of 1999. Similarly, the institutional finance data of 1997-98 began with the mailing of the form in November of 1998, but the data won't be released until year 2000; by then the data will be two years old. In fact, in some years, the time lag could be longer. For example, the 1995 CD-ROMs were released in late 1998, and the 1996 IPEDS CD-ROMs have not been released yet. This delay affects the use of the data and the kinds of analyses that can be done with the data. Although some surveys are turned around faster than others, the general perception of the lateness of data persists across surveys.

Options:

The perceived lateness of IPEDS data is attributable to multiple factors in data collection, processing, and dissemination. IPEDS is built in stages and relies on the integration of systems within four organizational components: the postsecondary institutions, the state agencies and their systems, the Census Bureau, and NCES. The overarching goal of achieving a high degree of quality as the data pass through each system within each of these components has been responsible for the extended time frame in which the surveys are fielded, data collected, edited, and released. The following situations have been identified as possible factors in the extended time frame of the current IPEDS:

1. At the data collection stage, institutions responding to the surveys may find that data are scattered across the campus and thus require time and cooperation from various offices to put together.
2. To some institutions, particularly institutions that do not participate in Title IV programs, there is not much incentive or motivation to respond to the survey in a timely fashion. Some institutions have limited technological and staff resources to handle all work requirements and thus treat IPEDS surveys as a relatively low priority task, delaying their responses.
3. All states except Texas require that data from at least some public institutions in the state be sent to a state coordinator first. The state coordinator may then compile the data from institution-provided student records, edit data forms, or provide other value-added processes before sending the data to NCES (i.e., coordinated data submission). These steps frequently create a lag in submitting the data. Based on the median date of submission, the coordinated data submissions generally lag two more months behind the non-coordinated submissions.
4. Standards for edit checks are very specific and allow little room for reasonable differences, resulting in a large number of institutions that require callbacks to resolve the failed edits.

For example, about 4,000 institutions responded to the 1997 Completions survey, and about 2,400 of them were identified as having a potential error. The problem was worse for some other surveys such as Fall Staff, Salaries and Benefits, and Finance. Solving these failed edits consumes a significant amount of effort and time.

5. At Census, the data collection agent for IPEDS, there is a decentralization of responsibility for data collection and computer processing support that may slow down the processing of data.
6. At NCES, there are requirements that tabulations be published before final data files can be released. This process also slows down the release of final data files.

Thus, to make IPEDS data more timely, systemic improvements in every aspect of the system are required. It might be possible to gain some improvement by making small refinements to the current design and operation of IPEDS, such as making the edit checks less restrictive so that it would take less time and effort to complete data processing. This improvement alone, however, would not have satisfied data users and policymakers. More drastic changes were needed. Such changes would require restructuring IPEDS and adopting new data collection and dissemination procedures.

E-2. Universe of Institutions

The issue:

Currently, the IPEDS universe is defined as all institutions whose primary purpose is to provide postsecondary education and that are open to the general public. They are extremely diverse in capabilities and interests. There are public, private not-for-profit, and proprietary four-year, two-year, and less-than-two-year institutions. Many of them participate in the Title IV programs, while many others do not. This diversity results in greater burden for less capable institutions and delays responses in less interested institutions. Additionally, there is a coverage problem, particularly for those institutions that do not participate in Title IV programs. For Title IV institutions, the coverage is fairly complete. For non-Title IV institutions, however, there is a high probability of undercoverage (about 15%) because of a high rate of closures and births of institutions. Further, the current IPEDS universe does not include Title IV program participants whose primary mission is not to provide postsecondary education or that are not open to the general public.

Moreover, non-Title IV institutions (about one-third of the total institutions surveyed) tend to have lower survey and item response rates and take a longer time to respond (see Table 1 below). Such response patterns require extra effort to follow up, slow down the data processing, and may contribute to inconsistent data on the files.

For these reasons, there were questions about who should be included in IPEDS, what information should be collected, and whether the same amount of information should be collected from all institutions. Answers to these questions will affect the design and operation of IPEDS.

Table 1. Response rates by Title IV status, level of institution and by survey, 1995

Survey	Level	Number of Title IV institutions	Title IV Response rate	Number of Non-Title IV institutions	Non-Title IV Response rate
Fall Enrollment	Total	6,258	97.1	2,517	65.9
	4-year	2,296	96.9	497	48.9
	2-year	2,093	97.3	459	71.5
	<2-year	1,869	97.0	1,561	69.6
Fall Staff	Total	6,327	94.8	2,519	63.6
	4-year	2,329	93.3	498	43.4
	2-year	2,124	95.4	460	69.6
	<2-year	1,874	95.8	1,561	68.2
Completions	Total	6,258	97.0	2,517	65.6
	4-year	2,296	97.1	497	49.9
	2-year	2,093	97.4	459	73.2
	<2-year	1,869	96.3	1,561	68.4
Finance	Total	6,324	94.1	2,520	53.7
	4-year	2,334	95.3	497	39.8
	2-year	2,116	93.2	462	63.0
	<2-year	1,874	93.7	1,561	55.3
IC 1997	Total	6,836	96.9	3,060	75.1
	4-year	2,460	96.9	470	74.3
	2-year	2,464	96.1	373	78.8
	<2-year	1,912	97.9	2,217	74.7

Options:

Variations of institutional response patterns, as mentioned earlier, may have multiple origins: the availability of human and physical resources, the perceived value of the data, the priority of tasks to be done in the same time period, and the consequences on institutions for not responding to the survey. Many institutions have limited resources and their staff members are often required to take care of other top priority tasks at the same time (e.g., responding to information requests by chief executive officers). Many institutions also do not use or do not know how to use IPEDS data and thus the data are perceived as irrelevant to them. They have little incentive to participate in the survey in a timely fashion or to provide quality data. Thus, options for improvement of IPEDS will need to take these factors into consideration, particularly to compensate for institutional capacity, reduce response burden, and enhance the usefulness and value of the data to institutions.

There were several options identified:

1. Make no change in the IPEDS universe, but focus on improving data collection and dissemination procedures. It was felt that reducing response burden and follow-up effort and increasing the relevance and use of data

could give institutions greater incentive to respond to IPEDS surveys in a timely fashion.

2. Group all postsecondary education institutions into Title IV and non-Title IV institutions, and then conduct a universe survey of Title IV institutions and a sample survey of non-Title IV institutions with the same set of data collection forms and procedures. Institutions would be requested to provide all data that are applicable to them. This would decrease the amount of effort needed to collect data from non-Title IV institutions but maintain the ability to provide national statistics of all postsecondary education in this country. However, it would not have consumer market information (e.g., basic information such as directory, enrollment, programs, tuition and fees) for many institutions and peer comparisons would not be possible for those institutions that are not included in the survey. Nor would it permit state level information on postsecondary education. Moreover, since many institutions would not be included in surveys regularly, they may not have the data systems that could provide the kind of data collected by IPEDS. This may further compromise the quality of data from such institutions.

3. Include all institutions that provide postsecondary education programs and group them into four categories by whether their primary mission is for postsecondary education, whether they participate in Title IV programs, and whether they are open to the general public. The four types are:

   - Type A are degree and other award granting Title IV postsecondary education institutions (i.e., whose primary mission is to provide postsecondary education) that are open to the general public;
   - Type B are degree and other award granting non-Title IV postsecondary education institutions that are open to the general public;
   - Type C are Title IV institutions whose primary mission is not to provide postsecondary education, but that offer postsecondary education programs to the general public (e.g., high schools that offer postsecondary education courses); and
   - Type D are all other institutions, including: (1) postsecondary education institutions whose programs are not open to the general public; and (2) non-Title IV institutions whose primary mission is not postsecondary education but includes postsecondary education programs.

NCES would then conduct a universe survey of all institutions with differential levels of data requests from various types of institutions. It was suggested that maximum data be collected from Type A institutions, and minimum data be collected from Types B and C institutions. Data about Type D institutions and their students cannot be reliably collected through IPEDS because of the extreme difficulties in identifying these institution. Data about these institutions shall be collected through individual-based surveys such as National Household Education Survey (NHES) and National Educational Longitudinal Study (NELS).

E-3. Data Collection and Processing Procedures

The issue:

The perceived lateness of IPEDS is largely attributed to the way the data are collected and processed: it takes too long to complete the data collection and thus data are not released in time for many management and policy decisions. Thus, there is an increasing need to look for alternative ways to collect and process IPEDS data.

Options:

The current IPEDS design involves a series of steps for processing paper surveys:

- NCES mails paper forms to institutions or state coordinators;
- institutions gather requested data and submit the data to their state coordinators or directly to the Bureau of the Census (IPEDS data collection agent);
- state coordinators compile the data or conduct other value-added processes and submit the data to the Bureau of the Census;
- the Bureau of the Census conducts edit checks and follows up with institutions or state coordinators to resolve edit-check failures;
- the Bureau of the Census imputes missing data and compiles the data files with documentation and submits them to NCES;
- NCES releases a preliminary data file when about 70% of the data are edited; and finally
- NCES reviews final imputed data files, develops a publication, and releases a final data file once the publication is approved.

Each of these steps takes some time to complete and thus adds to the total time lag for data dissemination. How to change these steps so that the data collection becomes more efficient and less burdensome is the real challenge to the redesign of IPEDS.

Representatives of data providers and users have suggested a number of options for smoothing data collection and editing. The options are:

1. Current paper forms with improved procedures: This improvement would focus on reducing state-coordinated submission and loosening edit specifications. NCES could negotiate with states to allow individual coordinated institutions to submit data directly to NCES. This could reduce the time lag for data submission. NCES could also redesign edit specifications so that fewer institutions would be followed up for failed-edits. This option would require fewer resources to implement than others, but the impact may be minimal.
2. Developing a unit record system: NCES could work with and assist institutions to develop a student and staff unit record system that contains all relevant data and then allow NCES to extract and synthesize the data requested by IPEDS directly from the data files. This option has many potential benefits. It would ensure data

consistency and high data quality. It would enable NCES to collect data on student mobility (e.g., transfer among institutions and changes in fields of study) and student performance (e.g., courses taken, credits earned, grades). It might also have the information for merging with external data from organizations such as the Social Security Administration and the Internal Revenues Service (IRS) to gather information on employment and incomes. This option, however, would encounter legal and ethical concerns such as confidentiality and privacy protection and might take many years to implement fully.

3. Web-based data submission: This option has two components: (a) replacing paper forms with Web-based data submission (electronic solutions), and (b) restructuring survey forms to reflect data availability as well as data contents (restructuring IPEDS forms). It would have a profound impact on IPEDS. The two components are further described below.

a. Electronic solutions

A Web-based mechanism would replace the traditional paper mode of collecting, processing, and publishing data. NCES would install software to collect the data through the Web directly from institutions and systems. Institution and state IPEDS coordinators can enter data manually or upload the data through file import. The software would have built-in edit checks with revised edit failure ranges, and give institutions and systems control over editing data. NCES would also provide software that would allow institutions to conduct peer group analyses easily and quickly once the data have been logged in (approved) by institutional or state IPEDS coordinators. Moreover, the software would also allow on-line analyses to produce standardized or specially-tailored tabulations quickly.

b. Restructuring IPEDS forms

It was suggested that NCES combine the data elements of different surveys into groups that cohere in terms of data availability as well as content. Data should be collected when institutions have them. Specifically, the NPEC/IPEDS finance, cost, and financial aid working group suggested that NCES begin an annual summer collection of mandated price, cost, and financial aid data items. This would permit the publication of information needed by consumers and constituents by September. The NPEC/IPEDS student issues focus working group suggested the following time frames for the collection and return to NCES/Census of the IPEDS data through a primarily Web-based collection mechanism. The goal was to provide a schedule of data collection that was consistent with institutional calendar. (Due date means completed surveys to NCES, not to state coordinators.)

- Summer Collection: due August 1

  IC (tuition, etc., but without Part E, which deals with unduplicated headcount and full-year credit hours)

- October Collection: due October 1

  Full-year unduplicated enrollments
  Degree completions
  Preliminary fall enrollment by level (new item)
  Credit hour activity

- December Collection: due December 1

  Fall enrollment
  Enrollment in occupationally specific programs
  Financial aid (through IC)
  Staff & salaries

- March Collection: Finance Data and Graduation Rates, due March 1

  Institutional finance
  Graduation rates

E-4. Data Contents and Quality

The Issue:

A major driving force behind redesigning IPEDS is concern about data needs and data quality. In addition to data recently mandated by the Higher Education Amendments of 1998, NCES has to determine what other data are useful and relevant to stakeholders for management analysis and policy decision making. Moreover, there is a concern about the consistency of data definitions, accuracy, reliability, validity, and other quality measures within and across surveys. In summary, there are three major issues:

- Are there any current data elements that can be deleted without creating a void for policy analysis, trend development, and other research?
- What data elements should be added to meet users' needs and to address emerging policy issues?
- What could be done to ensure consistency within IPEDS components and among other federal and non-federal surveys in postsecondary education?

Options:

There was limited flexibility in the area of data development for IPEDS. Suggested new items required strong justification for inclusion, as did removal of poor-quality or infrequently-used items, for fear of a further disruption in trend analyses. Moreover, changes require multiple levels of approval and thus added considerable time to the already stressed schedule of collection and release.

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The mandated changes will result in a heavy burden on institutional respondents and disrupt trends. New development should be geared to minimal changes to avoid additional burden on institutional respondents who rely on their systems to generate the data and who also rely on the immutability of certain items.

In response to the problems mentioned above, several options for determining data elements to be included in IPEDS were identified:

1. Develop a total data map for postsecondary education: A complete picture of data by survey systems (i.e., which surveys provide such data), census v. sample data (i.e., data collected from all or a sample of institutions), and frequency of data collection could be developed. This data map could be used to monitor the availability and intensity of the data at the national, state and institutional levels. It could also help NCES determine data changes in and coverage by IPEDS and other postsecondary data collection systems. This data map, however, would need constant updating to reflect the emerging data needs of the postsecondary education community.
2. Obtain consensus from IPEDS stakeholders. Some suggestions for content changes can be made through discussions with the community of IPEDS users. For example, the NPEC/IPEDS working groups have suggested some deletions and additions.
3. Work with external organizations such as the Association for Institutional Research (AIR) and organizations that developed the Common Data Set to develop new data elements (i.e., not included in IPEDS) to be provided by various types of institutions.

In addition, there were several options for improving data quality. They are listed below.

1. Provide feedback to the institutional chief executive. NCES would send back a set of key data elements from each institution in an appropriate form to its chief executive officer. This may help NCES convince the administrative community of the importance of the data and also provide support to the institutional research staff who must submit data annually.
2. Conduct evaluation studies of institutions with many failed-edits to determine why so that appropriate corrective actions can be developed.
3. Make a provider's guide to IPEDS more widely available to assist new data providers in gathering and submitting data.
4. Provide training workshops and award certificates of expertise to data providers who meet certain requirements. NCES would work with and support AIR and other concerned associations to develop a training curriculum, evaluation process and criteria and to conduct training. The workshops could be offered at the AIR annual Forum, regional conferences, and/or at NCES. NCES could also develop a fellowship program to select fellows from those certified IPEDS data providers to work at NCES for a year or two.

E-5. Data File Structure

The Issue:

The current IPEDS data files are structured in a format originally geared toward the mainframe computer. They are not considered very user friendly for high level analyses. IPEDS is not sufficiently customer oriented to facilitate data use.

Options:

When IPEDS was designed, the current computer technology was not available. The mainframe computer was still the dominant tool for analyses, and thus the data files were structured accordingly.

Advancements in PC technology and on-line service have drastically changed the way to structure data files and conduct analyses. Therefore, the improved IPEDS should make effective use of these new technologies. It was suggested that:

- All raw data should be released on CD ROM or on-line on the Web site. NCES should provide computer software enabling users to review, identify, select, and extract data of interest quickly and easily from various data files. An example of such software is the Electronic Code Book used by several NCES data systems such as NELS:88, and NPSAS. Such software should be added to the raw data files released on CD ROM or NCES Web site.

This option is an expansion of an existing strategic initiative of NCES. NCES has already deployed limited data access capabilities for IPEDS data on its Web site. IPEDS data files and documentation are available on the Web site for download, and several interactive search applications for accessing IPEDS data based on institution characteristics have been developed.

E-6. Data Analysis and Dissemination Mechanism

The Issue:

Stakeholders expressed a concern that IPEDS data have not been used to their potential as a management tool and for decision-making. This may dampen the incentive of institutions to provide data.

Options:

There are several possible reasons why IPEDS data are not used to their fullest potential. The perceived lateness of the data and the complexity of data files, as mentioned earlier, are frequently mentioned. Furthermore, users have different needs that require different

analytic approaches, but NCES has not developed systems that can effectively meet these needs. Moreover, data users have varying amounts of training and experience with NCES or similar files and have reported difficulty extracting and analyzing data from them.

Thus, there is a need to improve the preparation of files and development of data access systems. NCES is developing a peer-analysis system that will be appropriate for users of all levels of experience and accessible through the Web site.

In addition, NCES should undertake the following actions to facilitate the use of IPEDS data:

- Release raw data as soon as they have passed edit checks. There could be a separate release of the IPEDS data files that provide unbiased estimates for certain groups at the state, regional, or national level. This would require a revision of NCES policy or guidelines for data release.
- To facilitate peer analyses, develop computer software that would help researchers easily identify or select peer institutions and would present data of interest through a menu-driven system.
- Provide computer software enabling users to identify, select, and extract data of interest quickly and easily from various data files. An example of such software is the Electronic Code Book used by several NCES data systems such as NELS:88 and NPSAS. Such software would be added to the raw data files released on CD ROM or the NCES Web site.
- Provide software on-line that would allow users to specify the kind of statistical tables needed and then generate the tables promptly.
- Compile frequently and widely used statistical tables and make them available on line for users to select and download.
- Support analyses addressing policy issues that are identified jointly by representatives from concerned agencies, associations, and other organizations.
- Develop composite or derived variables and add them to the data file. The utility of IPEDS data should go beyond a simple listing of institutions and cross-tabulations to describe the characteristics of institutions and the condition of and changes to postsecondary education. Data from various components could be jointly analyzed to address high-level policy and research issues. These, however, require creative analyses and syntheses of data that are beyond the resources of many institutions. To assist these institutions, NCES could maintain a library of derived variables developed by experienced analysts, and make commonly used derived variables available in the peer analysis system for general use.

E-7. Outreach Communication Effort

The Issue:

Effective communication with data providers and users and with other agencies that collect similar data from postsecondary education institutions and participants is essential in improving response rates, data quality, and use of data. While there are mechanisms such as the National Postsecondary Education Cooperative to inform and discuss issues relating to

IPEDS and to coordinate with other data collection organizations, there is still a need for reaching out to data providers and users in order to improve IPEDS data quality. The communication is particularly critical to less-than-two-year institutions to increase their awareness of the importance of IPEDS data and their value as a management tool.

Options:

NCES should continue its effort to reach out to IPEDS data providers and users as well as organizations that conduct surveys of postsecondary education. Relevant information should be routinely posted on the NCES Web site and through other organizations' communication mechanisms. These organizations (not in any particular order) may include:

- American Council on Education (ACE),
- National Association of Student Financial Aid Administrators (NASFAA),
- American College Personnel Association (ACPA),
- Coalition of Higher Education Management Associations (CHEMA),
- National Association of College and University Business Officers (NACUBO),
- Society of College and University Planners (SCUP),
- State Higher Education Executive Officers (SHEEO),
- American Association of Collegiate Registrars and Admissions Officers (AACRAO),
- College and University Personnel Administrators (CUPA),
- National Association of Independent Colleges and Universities (NAICU),
- American Association of Community Colleges (AACC),
- National Association of State Universities and Land Grant Colleges (NASULGC),
- National Association for Equal Opportunity in Higher Education,
- College Board,
- American College Testing (ACT),
- Association for Institutional Research (AIR) (and regional AIR),
- EDUCAUSE,
- Association of Jesuit Colleges and Universities (AJCU)
- American Association of State Colleges and Universities (AASCU), and
- Software vendors for postsecondary education.

NCES should also conduct focus groups and conferences through the National Postsecondary Education Cooperative System to obtain input. Moreover, NCES should also continue its effort to coordinate with other agencies or organizations in collecting data, such as the Office of Postsecondary Education in the U.S. Department of Education, the National Science Foundation, and professional associations. Such coordination should aim at minimizing data redundancy and improving data consistency through standardization of data definition and collection procedures.

Finally, education and training solutions should be provided to support the coordinator system at the state level.

Attachment F. Lists of groups, organizations, and individuals consulted

1. List of meetings and participants

1). June 25, 1998: Meeting with NCES staff members who are survey leaders for IPEDS

Samuel Peng, Samuel Barbett, Michael Cohen, Austin Lin, Tom Snyder,
Pat Brown, Rosa Fernandez, Roslyn Korb, Meredith Ludwig, Susan Broyles,
Frank Morgan, Peter Stowe, Joseph Rose

2). July 28, 1998: American Psychological Association Meeting

Dennis Carroll, Samuel Peng, and Michael Cohen from NCES;
Guests: Jill N. Reich, Richard C. McCarty, Nina G. Levitt, and Jessica L. Kohout
from the American Psychological Association; and Catherine Gaddy from CPST

3). July 29, 1998: Meeting with OERI Researchers

Samuel Peng, Michael Cohen, Roslyn Korb, Meredith Ludwig, Tom Snyder,
Dennis Carroll
Guests: Carol Lacampagne, Norman Brandt, Cliff Adelman, Paula Knepper, Larry Bobbitt,
Duc Le To, Aurora D'Amico, Bernie Greene provided comments from Westat

4). August 12, 1998: Meeting with Census Bureau staff

Samuel Peng, Joseph Rose, Roslyn Korb, Tom Snyder, Meredith Ludwig,
Dennis Carroll
Guests from the Census Bureau: Diana Cull, Johnny Monaco, Terry Kennerly, Jan Ploteczyk
and Andrew Mary

5). September 17, 1998—Meeting with association representatives and data users

Paul Nelson, American Psychological Association
Melissa Markowitz, American Association of State Colleges and Universities
Ken Redd, SallieMae
Kathy Volle, The Institute for Higher Education Policy
Carol Fuller, National Association of Independent Colleges and Universities
Joseph Rose, NCES
Samuel Peng, NCES
Peter Syverson, Council of Graduate Schools
Mary Dilworth, American Association of Colleges of Teacher Education
Harriet Wynn, American Association of Colleges of Teacher Education
Alisa Cunningham, The Institute for Higher Education Policy
Meredith Ludwig, Education Statistics Services Institute
Roslyn Korb, NCES
Tom Snyder, NCES

Dennis Carroll, NCES
Gary Phillips, NCES

6). October 21, 1998: Meeting with Department of Education representatives

Dan Madzelan, Dan Goldenberg, Hugh Berry, Sam Peng, Tom Snyder, Joe Rose, Roz Korb

7). May 17, 1999: *IPEDS* Review Working Group

Brenda Ashford, American Association of College Registrars and Admission Officers
Lisa Bagley, Council of Graduate Schools
Robert Barak, Iowa State Board of Regents
Samuel Barbett, National Center for Education Statistics
David Bergeron, OPE, U.S. Department of Education
Hugh Berry, Office of Special Education & Rehabilitative Services
Walter Biddle, Career Training Foundation
Susan Broyles, National Center for Education Statistics
Joan Burrelli, National Science Foundation
Dennis Carroll, National Center for Education Statistics
Michael Cohen, National Center for Education Statistics
Valerie Martin Conley, Virginia Polytechnic Institute & State University
Suzanne Duval, U.S. Department of Education
Melanie Esten, National Association of Independent Colleges and Universities
Pascal Forgione, National Center for Education Statistics
Carol Fuller, National Association of Independent Colleges and Universities
Marty Guthrie, National Association of Student Financial Aid Administrators
Susan Hill, National Science Foundation
Charles Hopkins, UNISYS Corporation
Jacqueline King, American Council on Education
Roslyn Korb, National Center for Education Statistics
Hans L'Orange, State Higher Education Executive Officers
Michael Lance, Education Statistics Services Institute
William LaRocque, Education Statistics Services Institute
John Lee, J B L Associates, Inc.
Meredith Ludwig, Education Statistics Services Institute
Peter McCabe, Office for Civil Rights
Michael Middaugh, University of Delaware
John Milam, University of Virginia
Johnny Monaco, U.S. Bureau of the Census
Jay Noell, Office of Postsecondary Education
Eileen O'Brien, American Indian Higher Education Consortium
Samuel Peng, National Center for Education Statistics
Kent Phillippe, American Association of Community Colleges
Travis Reindl, American Association of State Colleges & Universities
Joseph Rose, National Center for Education Statistics
Sameena Salvucci, Synectics for Management Decisions, Inc.
Mary Sapp, University of Miami, Florida
Max Scruggs, Office for Civil Rights

2. NPEC-IPEDS Overarching Group on Review of IPEDS

Roslyn Korb, Chair, Postsecondary Cooperative System, Analysis and Dissemination, NCES
Marc Anderberg, Automated Follow-up Systems, Texas SOICC
Robert Barak, Iowa State Board of Regents
Susan Broyles, NCES
Dennis Carroll, NCES
Carol Fuller, National Association of Independent Colleges and Universities
Dan Madzelan, Office of Postsecondary Education, U.S. Department of Education
Michael Middaugh, Institutional Research and Planning, University of Delaware
John Milam, George Mason University
Tom Mortenson, Postsecondary Opportunity
Johnny Monaco, Postsecondary Education Statistics Branch, the Bureau of Census
Samuel Peng, Statistical Standards and Services Group, NCES
Kent Phillippe, American Association of Community Colleges
Mary Sapp, Planning and Institutional Research, University of Miami

3. NPEC Working Groups on Issues

1). Student Issues Focus

Mary Sapp, Chair, Planning and Institutional Research, University of Miami
Marc Anderberg, Follow-up SOICC, Texas
Bob Barak, Iowa State Board of Regents

Susan Broyles, NCES
Peggye Cohen, Office of Institutional Research, George Washington University
Joe Hagy, Oklahoma Regents
Susan Hill, National Science Foundation
Marsha Hirano-Nakanishi, California State University System
Peter McCabe, Office for Civil Rights. U.S. Department of Education
Johnny Monaco, Postsecondary Education Statistics Branch, the Bureau of Census
Tom Mortenson, Postsecondary Opportunity
Sally Mydlowec, Manor Junior College, Pennsylvania
Max Scruggs, Office for Civil Rights, U.S. Department of Education
Jeff Seybert, Johnson County Community College, Kansas
Karen Spahn, University of Phoenix

2). Universe

Charles Manning, Chair, University System of West Virginia
Nabeel Alsalam, Congressional Budget Office
Walter Biddle, Career College Association
Susan Broyles, NCES
Charles Cook, New England Association, Commission on Higher Education

Ed Crowe, Arkansas Department of Higher Education
Cathy Dippo, Bureau of Labor Statistics
Ronald Doernbach, Southwestern University
Susan Frost, Emory University
Carol Fuller, National Association of Independent Colleges and Universities
Renee Gernand, the College Board
Thomas Henry, Wyoming Community College Commission
Johnny Monaco, Postsecondary Education Statistics Branch, Census Bureau
Kent Phillippe, American Association of Community Colleges

3). Finance, Cost, and Financial Aid

Michael Middaugh, Chair, University of Delaware
David Bergeron, Office of Postsecondary Education, US Department of Education
Paul Brinkman, University of Utah
Susan Broyles, NCES
Sue Budak, Independent financial consultant
Clare Cotton, Association of Independent Colleges and Universities in Massachusetts
Pat Dallet, Florida Postsecondary Education Planning Commission
Carol Fuller, National Association of Independent Colleges and Universities
Larry Goldstein, National Association of College and University Business Officers
Dennis Jones, NCHEMS
Robert Kuhn, Louisiana State University
John Lee, JBL Associates
Dan Madzelan, Office of Postsecondary Education, US Department of Education
Marcia Mintz, Cambridge Associates
Johnny Monaco, Postsecondary Education Statistics Branch, Census Bureau
Michael Mullen, Northern Arizona University
Jay Noell, US Department of Education
Mark Putnam, Connecticut College
Sandra Stark, Binghamton University
Max Scruggs, Office for Civil Rights, U.S. Department of Education
Peter Stowe, NCES
Kala Stroup, Commissioner of Higher Education, Missouri
Robert Toutkoushian, University System of New Hampshire
Gordon Winston, Williams College

4). Faculty and Staff Issues

Deborah Teeter, Chair, University of Kansas
Gary Barnes, University of North Carolina General Administration
Ernie Benjamin, American Association of University Professors
Joan Burelli, National Science Foundation
Patricia Brown, NCES
Susan Broyles, NCES
Valerie Conley, Virginia Polytechnic and State University
Laura Saunders, Highline Community College
Rosa Fernandez, NCES

Carol Fuller, National Association of Independent Colleges and Universities
John Hammang, American Association of State Colleges and Universities
Tracy Hunt-White, the Catholic University of America
Cheryl Lovell, University of Denver
Joe Marks, Southern Regional Education Board
Peter McCabe, U.S. Department of Education
John Milam, George Mason University
Johnny Monaco, the Bureau of Census
Marsha Moss, University of Texas at Austin
Elizabeth Pollicino, St. John's University, Long Island
Max Scruggs, Office for Civil Rights, U.S. Department of Education
Linda Zimbler, NCES

4. Higher Education Association IPEDS Working Group

Kent Phillippe, American Association of Community Colleges
Christopher Shults, American Association of Community Colleges
Brenda Ashford, American Association of Collegiate Registrars and Admissions Officers
Travis Reindl, American Association of State Colleges and Universities
Brian Trzebiatowski, American Association of State Colleges and Universities
Terry Hartle, American Council on Education
Jaci King, American Council on Education
Eileen O'Brien, American Indian Higher Education Consortium
Bill Fendley, Association for Institutional Research
Marsha Krotseng, Association for Institutional Research
Terry Russell, Association for Institutional Research
Frank Chauvin, Career College Association
Peter Syverson, Council of Graduate Schools
Lauren Bright, Coalition of Higher Education Assistance Organizations
Renee Gernand, The College Board
Larry Gladieux, The College Board
Todd Harmening, National Association of College and University Business Officers
Bea Wallace, National Association for Equal Opportunity in Higher Education
Melanie Esten, National Association of Independent Colleges and Universities
Carol Fuller, National Association of Independent Colleges and Universities
Marty Guthrie, National Association of Student Financial Aid Administrators
Doris Dixon, National Collegiate Athletic Association

5. Associations that sponsored IPEDS Redesign briefings

Southern Association of Institutional Research (October 17-20, 1998)
American Association of Collegiate Registrars and Admissions Officers (April 21, 1999)
State Higher Education Executive Officers (May 10-11, 1999)
Association of Institutional Research (January 28-29, May 29 - June 3, 1999)
Career College Association (June 25, 1999)
National Association of Student Financial Aid Administrators (July 12-14, 1999)